WELLCOME BUREAU

OF

SCIENTIFIC RESEARCH

AND

MUSEUM OF MEDICAL SCIENCE

INCLUDING TROPICAL MEDICINE AND HYGIENE

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THE WELLCOME
BUREAU OF SCIENTIFIC RESEARCH
AND
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(INCLUDING TROPICAL MEDICINE AND HYGIENE)

THE WELLCOME BUREAU OF SCIENTIFIC RESEARCH AND MUSEUM OF MEDICAL SCIENCE
25-28, Endsleigh Gardens, Gordon Square, London, W.C. 1

THE WELLCOME
BUREAU OF SCIENTIFIC RESEARCH
AND
MUSEUM OF MEDICAL SCIENCE
(INCLUDING TROPICAL MEDICINE AND HYGIENE)

25–28, ENDSLEIGH GARDENS, LONDON

C. M. WENYON, C.M.G., C.B.E., M.B., B.S., B.SC.,
Director-in-Chief OF THE BUREAU

S. H. DAUKES, O.B.E., B.A., M.B., B.CH., M.R.C.S., L.R.C.P., D P.H.,
D.T.M. & H., *Director* OF THE MUSEUM

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RESEARCH INSTITUTIONS AND MUSEUMS
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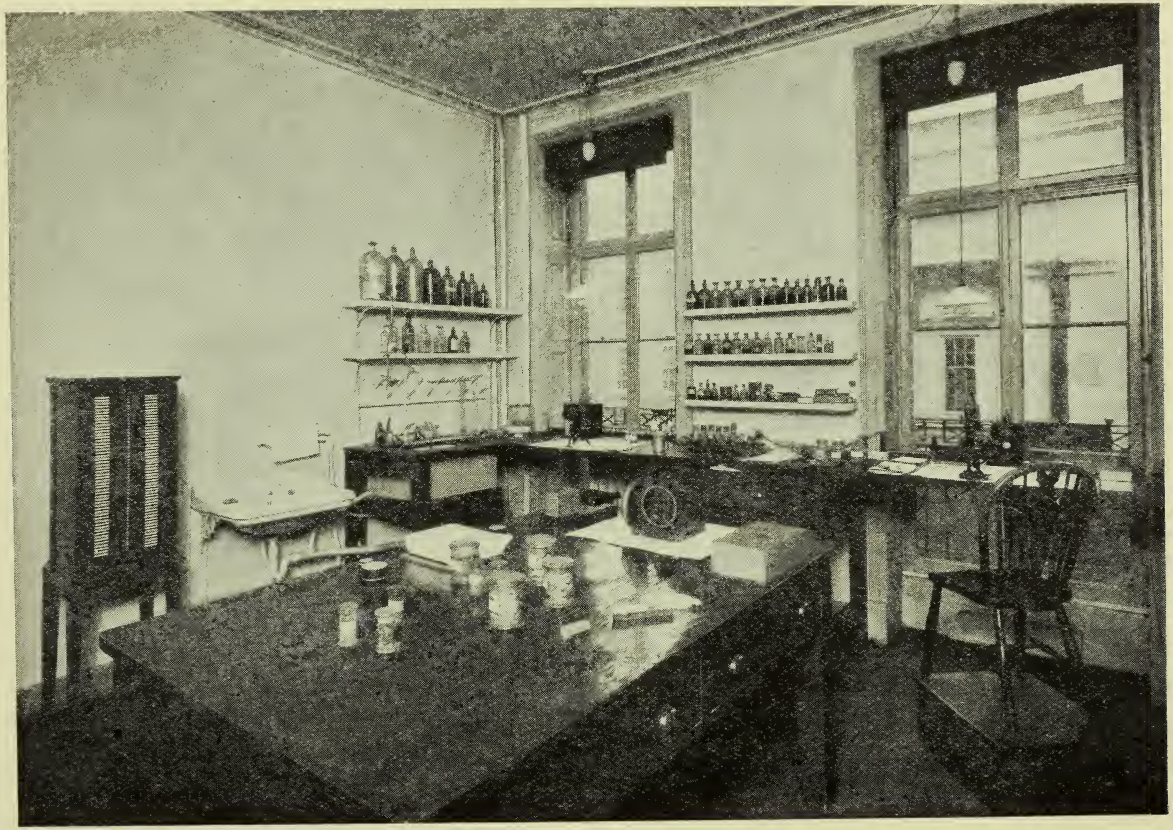


Director-in-Chief's Laboratory—Wellcome Bureau of Scientific Research

RESEARCH INSTITUTIONS AND MUSEUMS
FOUNDED BY HENRY S. WELLCOME

FOUNDED IN 1913

THE WELLCOME
BUREAU OF SCIENTIFIC RESEARCH

C. M. WENYON, C.M.G., C.B.E., M.B., B.S., B.SC. *Director-in-Chief*

25–28, Endsleigh Gardens, LONDON

ALL THE INSTITUTIONS HEREIN REFERRED TO ARE AFFILIATED WITH THE BUREAU.

The BUREAU Buildings have recently been reconstructed and enlarged. The Laboratory facilities for research are now greatly increased, and additional halls provided for the many new exhibits of the Museum of Medical Science.

The BUREAU consists of a series of specialised Scientific Research Laboratories devoted to investigations concerning the various branches of Medical Science, including Medical Zoology, Parasitology, Bacteriology, Pathology, Therapeutics, Tropical Medicine and Hygiene, and other subjects.

There are twelve well-equipped Laboratories and also an Art Studio, a Photographic Department, Animal Houses and various Preparation Rooms.

The LIBRARY contains representative standard works and current medical literature, particularly that dealing with tropical medicine and parasitology.

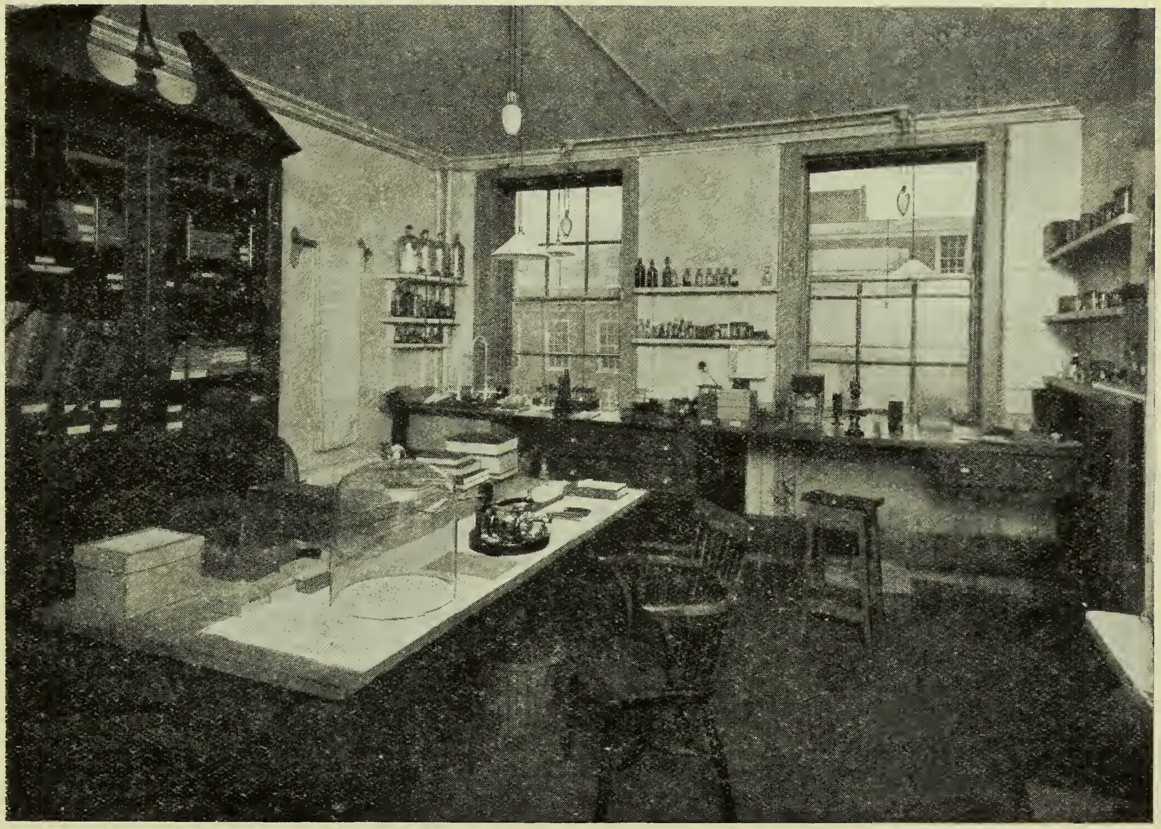
A Bacteriological Research Laboratory—Wellcome Bureau of Scientific Research

Routine teaching is not undertaken, but individual workers who wish to follow any particular line of investigation, or who cannot receive instruction elsewhere, are given accommodation and helped in their studies.

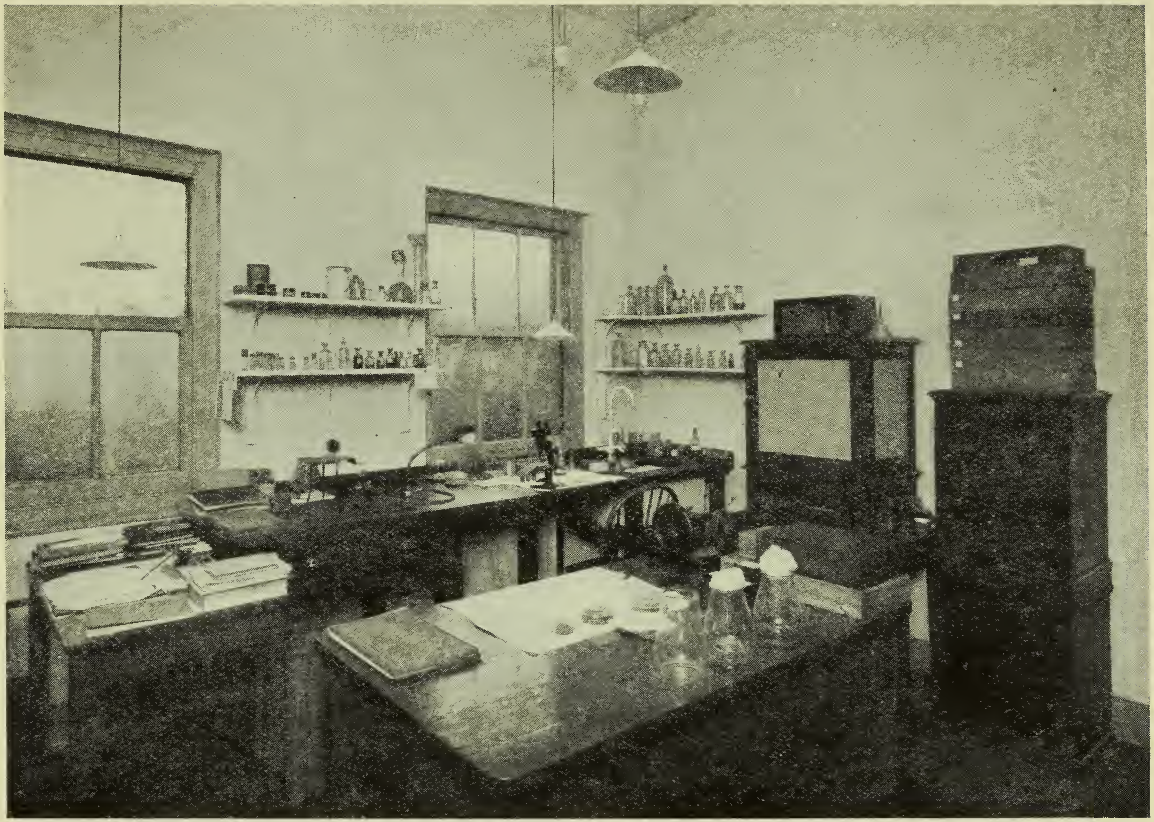
The BUREAU exists not only for the purpose of research, but also for that of supplying information gratis to Medical Men, Health Officers and others interested.

Throughout the Great World-War THE BUREAU OF SCIENTIFIC RESEARCH and its resources were placed wholly at the disposal of the British War Office, and the members of its scientific staff were actively engaged on Home and Colonial Army Medical work in England and in the various fields of action, especially in the tropical and sub-tropical areas.

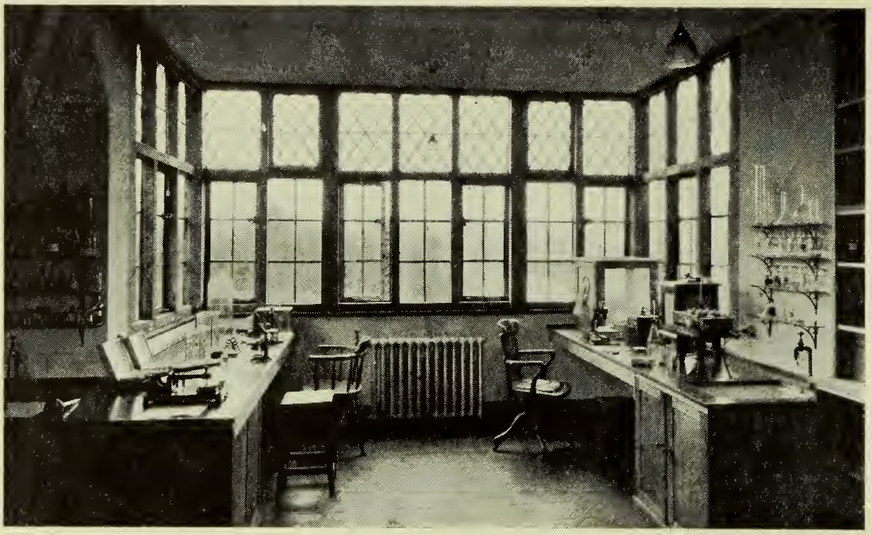
The detailed results of the investigations carried on at the Bureau and the other Laboratories mentioned on *pages* 39-46, 53-67, 71-83 *and* 89 have been published for the most part in various scientific periodicals and transactions.

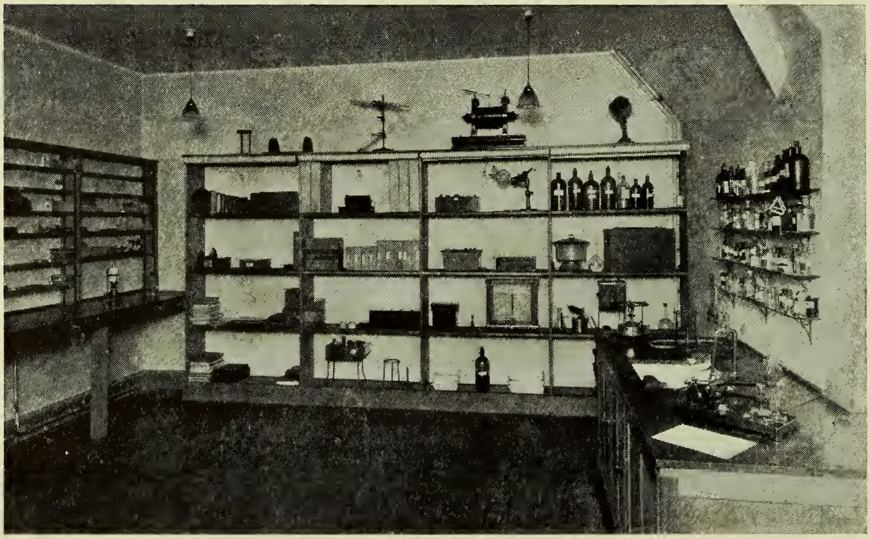


A Pathological Research Laboratory—Wellcome Bureau of Scientific Research



An Entomological Research Laboratory—Wellcome Bureau of Scientific Research





Two Aspects of the Entomological Field Laboratory—Wellcome Bureau of Scientific Research
At the Royal Horticultural Society's Gardens, Wisley, Surrey

ESTABLISHED IN 1920

THE ENTOMOLOGICAL FIELD LABORATORY
OF THE
BUREAU OF SCIENTIFIC RESEARCH

M. E. MACGREGOR, M.A., *Entomologist*

At the Royal Horticultural Society's Gardens
WISLEY, SURREY

The Entomological Field Laboratory is located at the Royal Horticultural Society's Gardens at Wisley, Surrey, where, through the courtesy of the Society's Committee and the Director of the Gardens, suitable laboratory accommodation has been provided.

This Laboratory carries on researches into the life-history and habits of such noxious insect pests as mosquitoes, etc., etc., a careful study of which in the field affords the surest means of discovering methods for their control and extermination.

Part of Hall V, First Floor—Wellcome Museum of Medical Science

FOUNDED IN 1914

THE MUSEUM OF MEDICAL SCIENCE

INCLUDING TROPICAL MEDICINE AND HYGIENE

S. H. DAUKES, O.B.E., B.A., M.B., B.CH., M.R.C.S., L.R.C.P.,
D.P.H., D.T.M. & H., *Director*

25-28, Endsleigh Gardens, LONDON

This Museum has recently been enlarged and rearranged, and many important specimens added to the exhibits.

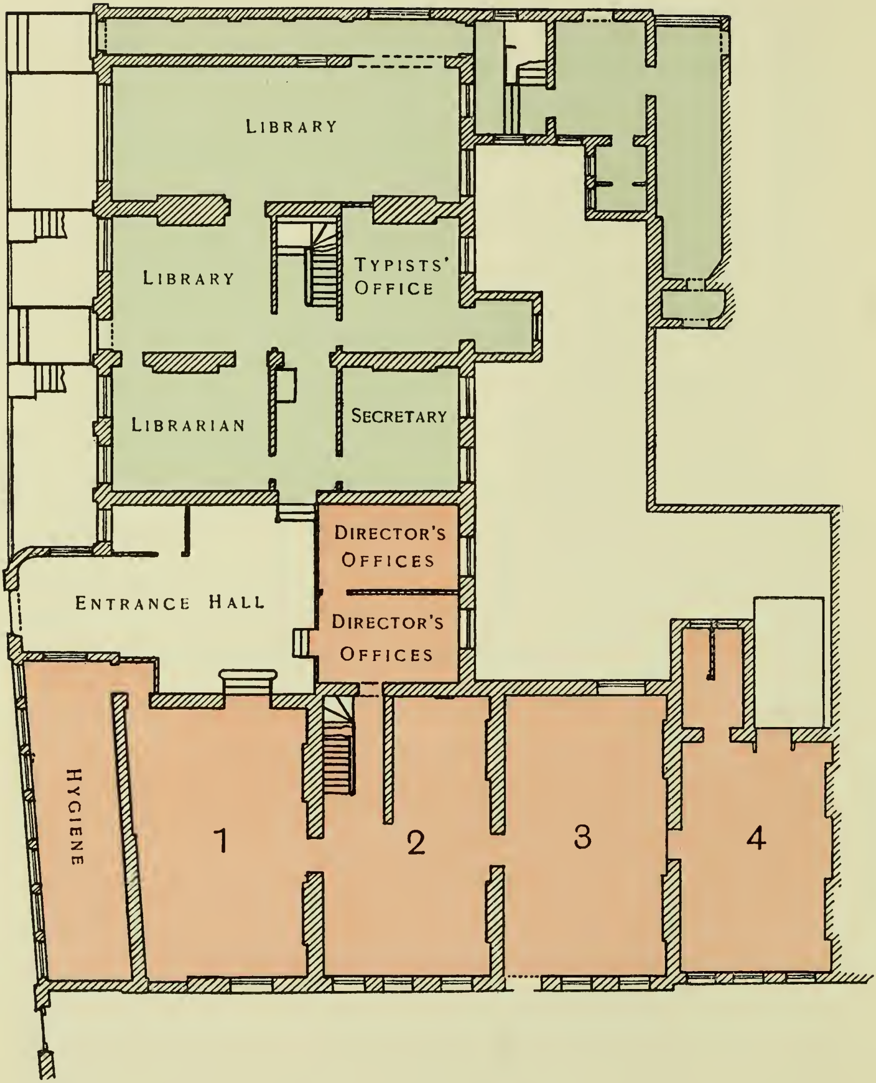
The purpose of the Museum is to give a general survey of human disease from every aspect. The causation, pathology, symptomatology, treatment and prevention of disease are demonstrated by means of pathological specimens, models, paintings, photographs, etc., in such a way as to convey a graphic picture of the more important features.

Associated with each disease a short summary is set forth of the important points; also there is a file containing abstracts with regard to all the more recent work.

A museum demonstration of the microscopic side of morbid anatomy presents certain difficulties; an effort has been made to overcome these by means of colour photo-micrography. In many of the halls these photographs are shown in special illuminated cases. Thus attempts have been made to provide a continuous demonstration of disease which will fix itself on the attention and memory of those who visit the Museum.

The Museum of Medical Science will be open to all Medical Men, Health Officers and Students, also to laymen interested in medicine, provided they are introduced by a registered Medical Practitioner. Many Teachers of Medicine have found this Museum helpful to them in illustrating effectually the various branches of Medical Science to their Students, and they are cordially invited to continue such use of the Museum. Arrangements can be made in advance for teachers to give demonstrations to their classes.

PROGRESS. At the present time many sections of the Museum are complete and well supplied with material; nevertheless, some sections which have only recently been organised are in a very early stage of development. The reorganisation and re-opening of the Museum, it is anticipated, will materially assist the progress of the educative scheme. Much of its success depends upon the continued co-operation, help, advice and generous



GROUND FLOOR

WELLCOME BUREAU OF SCIENTIFIC RESEARCH AND MUSEUM OF MEDICAL SCIENCE

Bureau Tinted Blue
Museum Tinted Red

contribution of specimens and information by Medical Men and other Scientists interested in this field of work in various parts of the world. Indebtedness for such help is most gratefully acknowledged.

GENERAL ARRANGEMENT. The Museum consists of twenty small halls and has been arranged to afford a continuous demonstration. The halls are numbered in series, and, by means of arrows and smaller numbers, the significance of teaching, in each section, is indicated. All the specimens and illustrations bear full descriptive labels.

The Entrance Hall to the Museum contains three exhibits illustrative of progress—an African medicine man at work, a mediæval alchemist in his cell, and a laboratory bench with modern equipment. The remaining halls on the Ground Floor deal with diseases caused by the Metazoa—venomous beasts, worms, etc. The First Floor is devoted to diseases caused by Protozoa and Spirochætes, whilst one hall is given up to leprosy and tuberculosis. The Second Floor has a large exhibit dealing with skin diseases and the various exanthemata. Three halls are devoted to other bacterial diseases, and one to infective diseases of doubtful or unknown causation. The Third Floor demonstrates the dietetic diseases, also metabolic, endocrine and blood diseases. A section is given up to new growths.

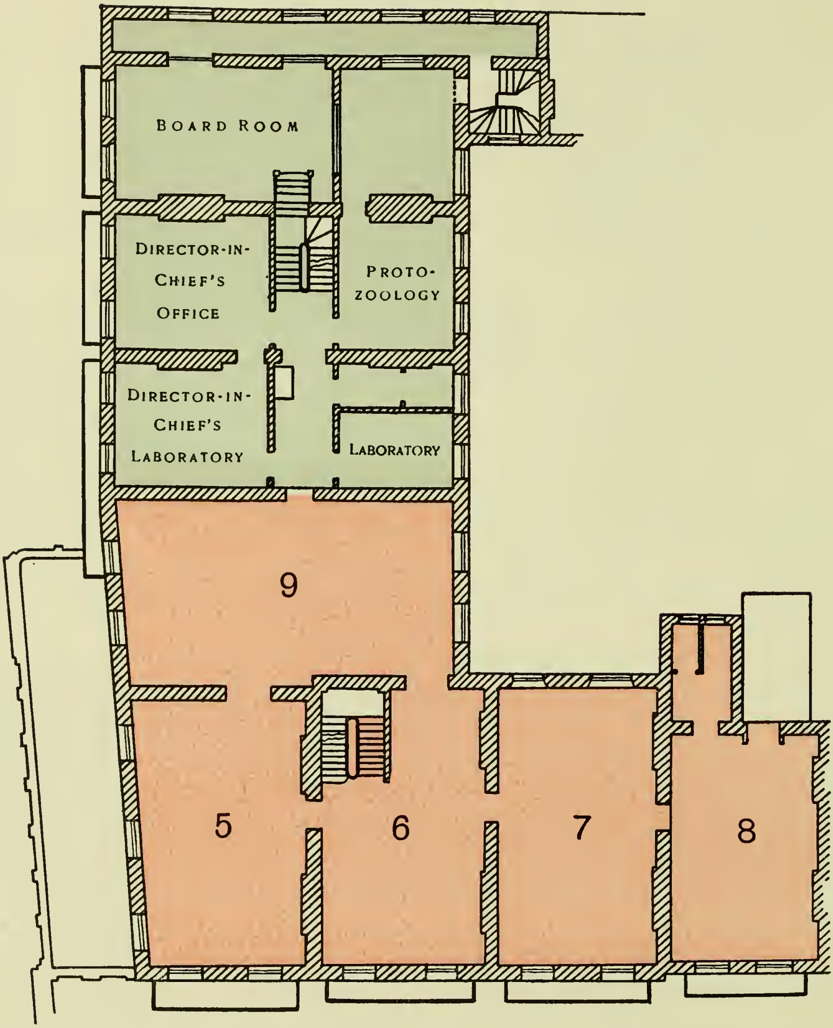
THE FUTURE. Large though the exhibit is, it can only be regarded as a beginning. It is hoped that in time double the space will be available and that the whole range of medicine and surgery will be covered. At present it has only been possible to survey briefly some subjects, and others have been entirely neglected. This is inevitable in starting such an undertaking, which must take many years to complete. It is hoped that, as the Museum develops, this demonstration will include the more recent research work on medicine and a survey of the practical results from such work.

DETAILED ARRANGEMENT OF MUSEUM

GROUND FLOOR

HALL I—Tableaux illustrating medical progress.

HALL II—Venomous beasts.
Insect invasion of the human body.



FIRST FLOOR

WELLCOME BUREAU OF SCIENTIFIC RESEARCH AND MUSEUM OF MEDICAL SCIENCE

Bureau Tinted Blue

Museum Tinted Red

HALL III—General helminthology.
Ancylostomiasis.
Filariasis.
Other nematode infections.

HALL IV—Schistosomiasis.
Other trematode infections.
Cestode diseases.

FIRST FLOOR

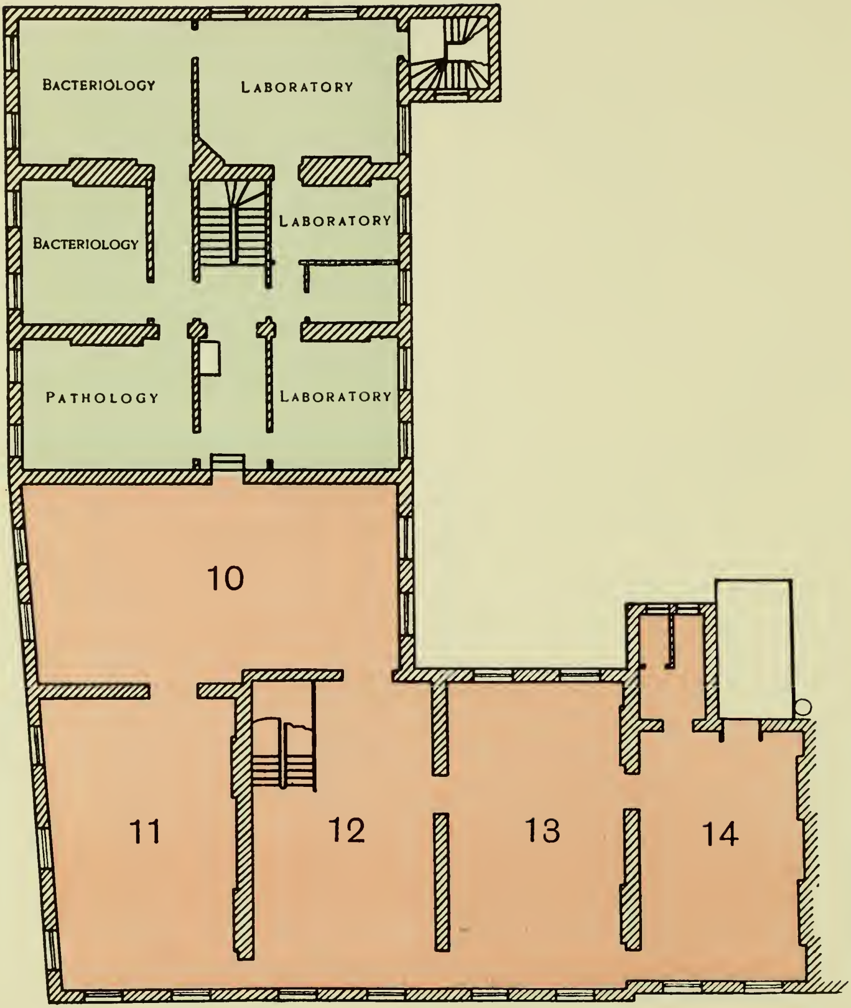
HALL V—General Protozoology.
Trypanosomiasis—Sleeping sickness.
Leishmaniasis—Kala azar and Oriental sore.

HALL VI—Malaria.
Blackwater fever.

HALL VII—Amœbic dysentery and abscess of the liver.
Spirochætal Diseases—
Relapsing fever.
Weil's disease.
Rat-bite fever.
Yellow fever.
(Phlebotomus fever).
(Dengue).

HALL VIII—Spirochætal Diseases.
Syphilis.
Yaws.

HALL IX—Leprosy.
Tuberculosis.



SECOND FLOOR

WELLCOME BUREAU OF SCIENTIFIC RESEARCH AND MUSEUM OF MEDICAL SCIENCE

Bureau Tinted Blue Museum Tinted Red

SECOND FLOOR

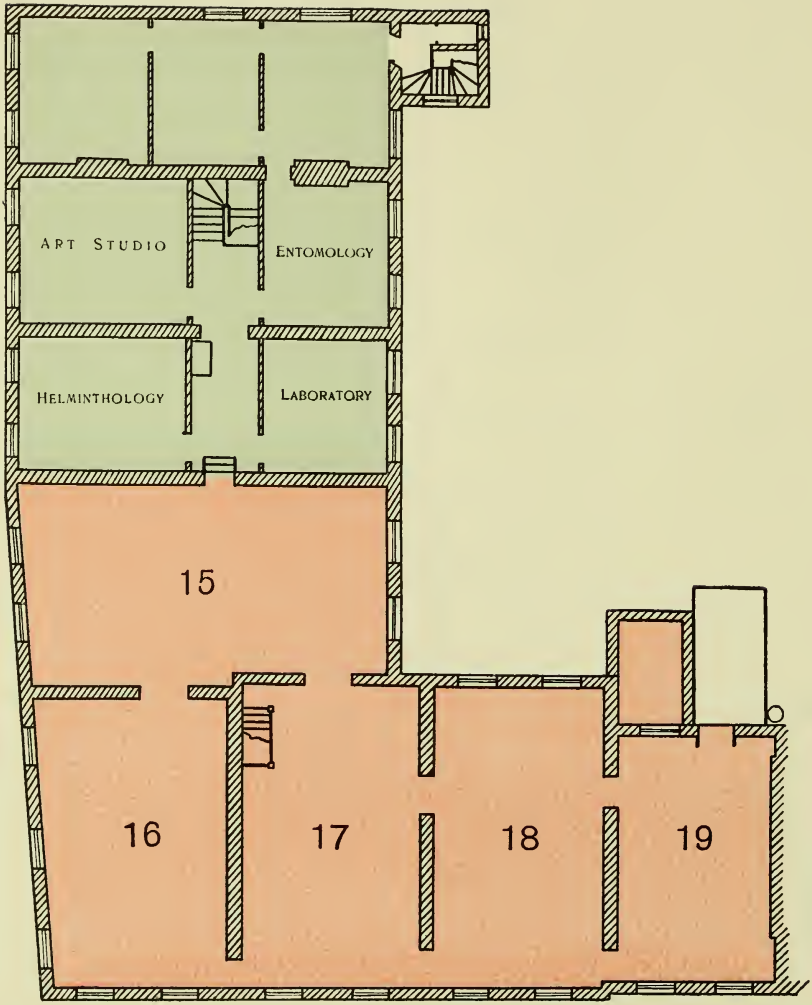
HALL X—Small-pox.
Chicken-pox.
Alastrim.
Vaccinia.
Scarlet fever.
Rubella.
Measles.
Skin diseases.

HALL XI—Pyogenic infections.
Septicæmia.
Cerebro-spinal meningitis.
Poliomyelitis.
Lethargic encephalitis.
Pneumonia.
Influenza.
Whooping cough.
Gonorrhœa.

HALL XII—Intestinal Bacterial Diseases.
Undulant fever.
Bacillary dysentery.
Typhoid fever.
Cholera.

HALL XIII—Other Bacterial Diseases.
Plague.
Diphtheria, etc.

HALL XIV—Infectious Diseases of doubtful and unknown origin.



THIRD FLOOR

WELLCOME BUREAU OF SCIENTIFIC RESEARCH AND MUSEUM OF MEDICAL SCIENCE

Bureau Tinted Blue Museum Tinted Red

THIRD FLOOR

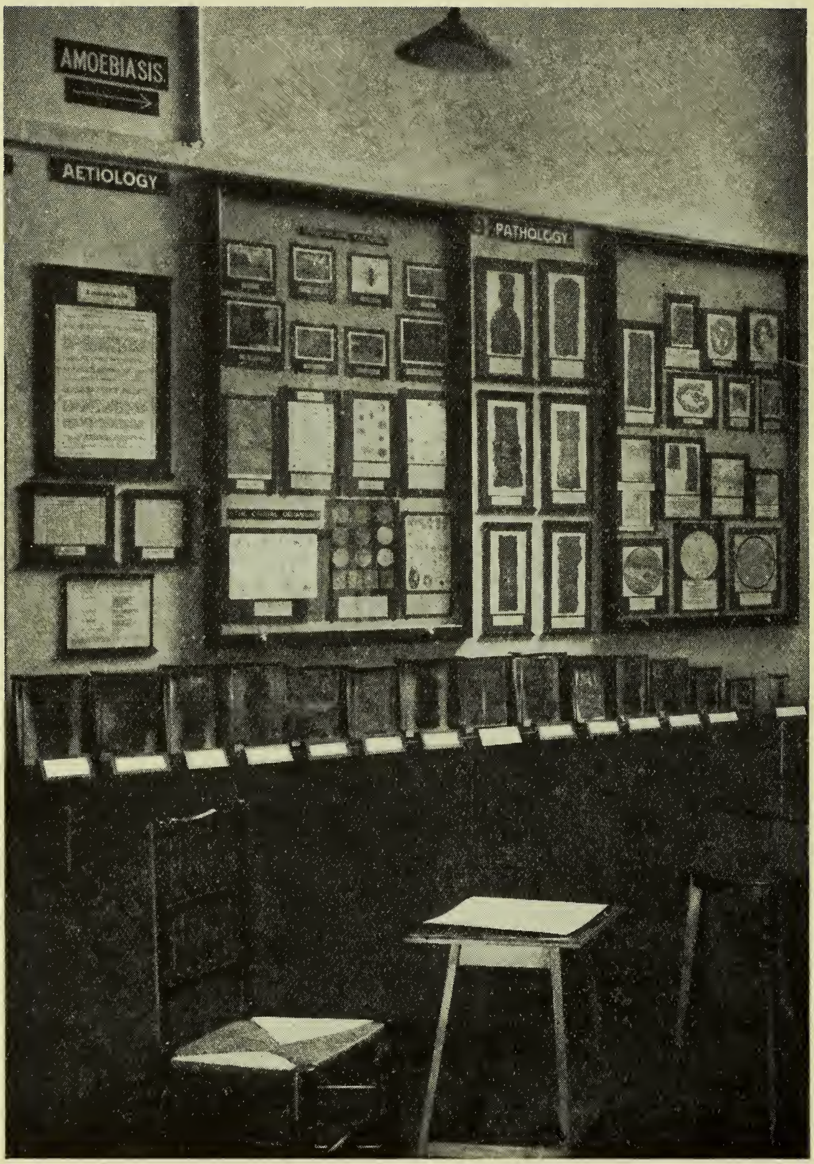
HALL XV—Food and Deficiency Diseases.

HALL XVI—Metabolic and Endocrine Diseases.

HALL XVII—Blood Diseases.

HALL XVIII—New Growths.

HALL XIX—Statistics.



Part of Hall VII, First Floor
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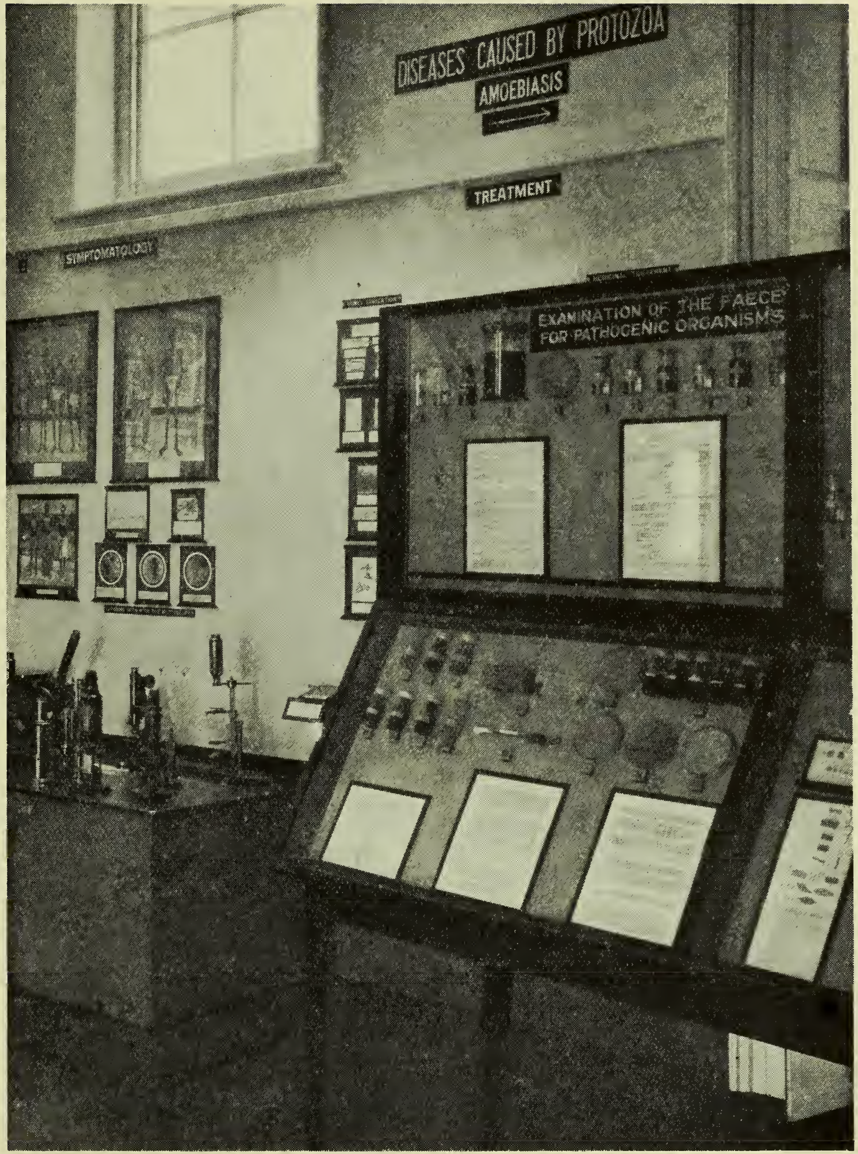
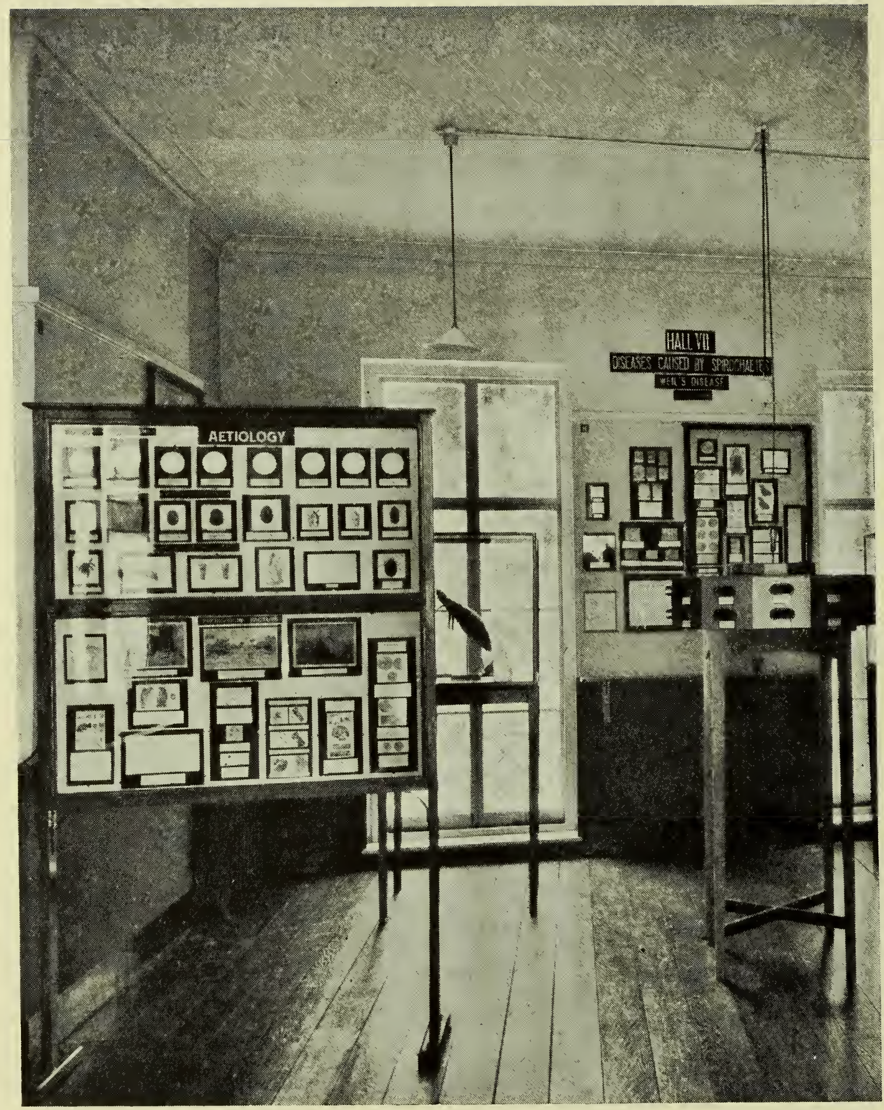

DISEASES CAUSED BY PROTOZOA
AMOEBIASIS
TREATMENT
SYMPTOMATOLOGY
EXAMINATION OF THE FAECES FOR PATHOGENIC ORGANISMS

Part of Hall VII, First Floor
Wellcome Museum of Medical Science



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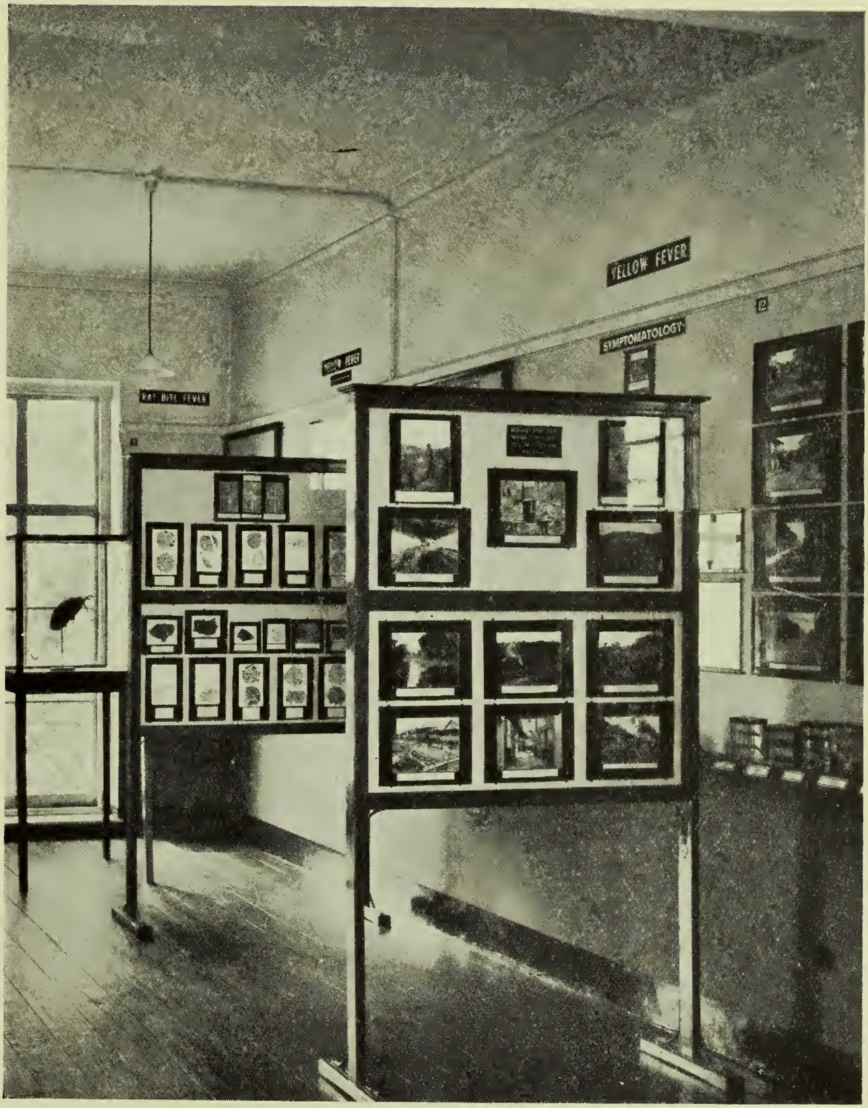

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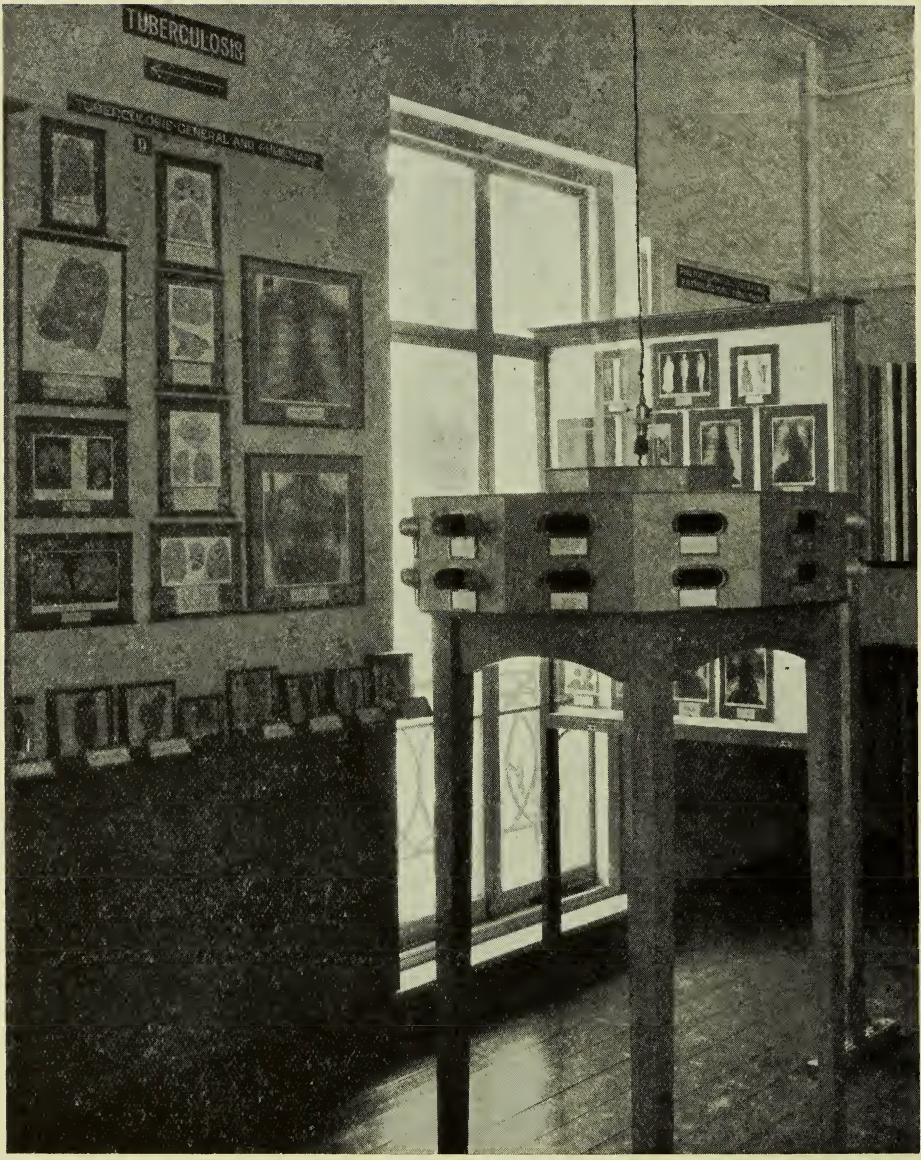

Part of Hall IX, First Floor
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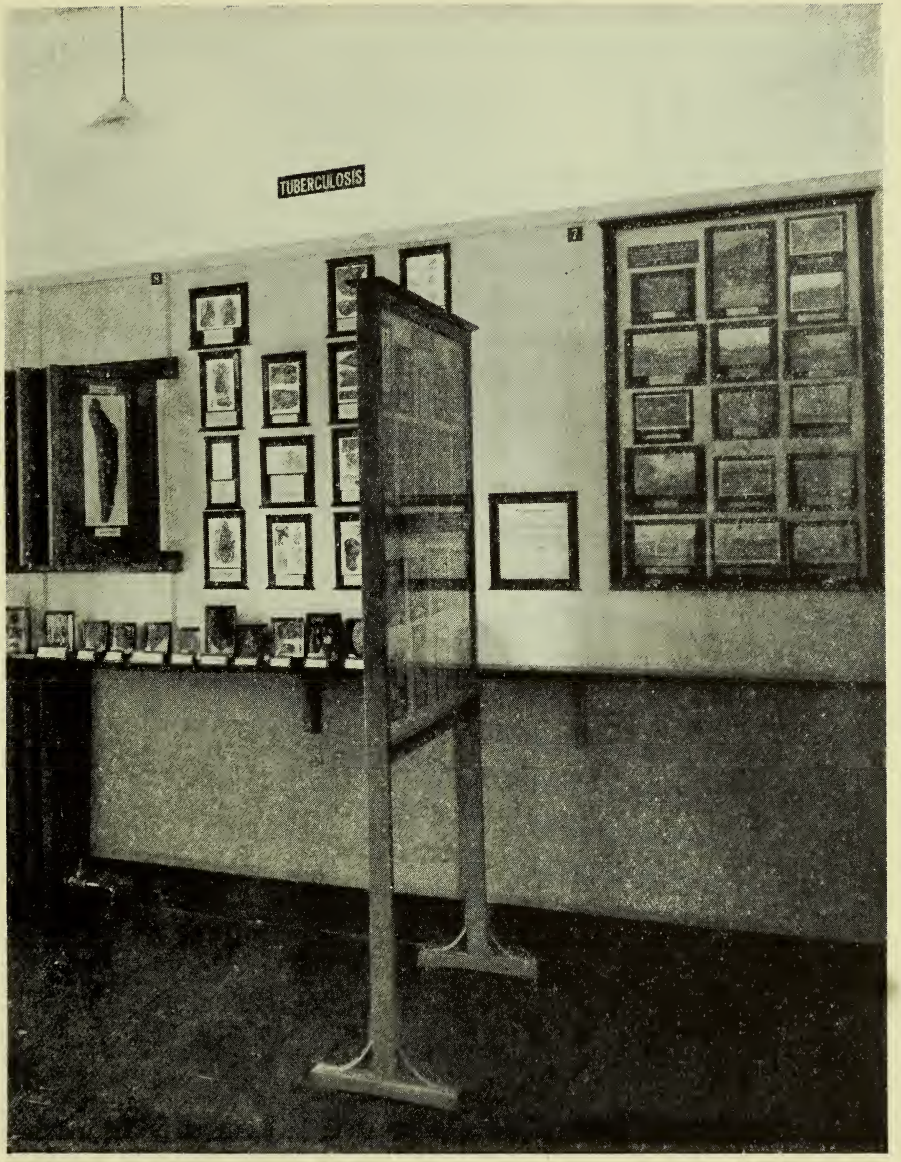

Part of Hall IX, First Floor
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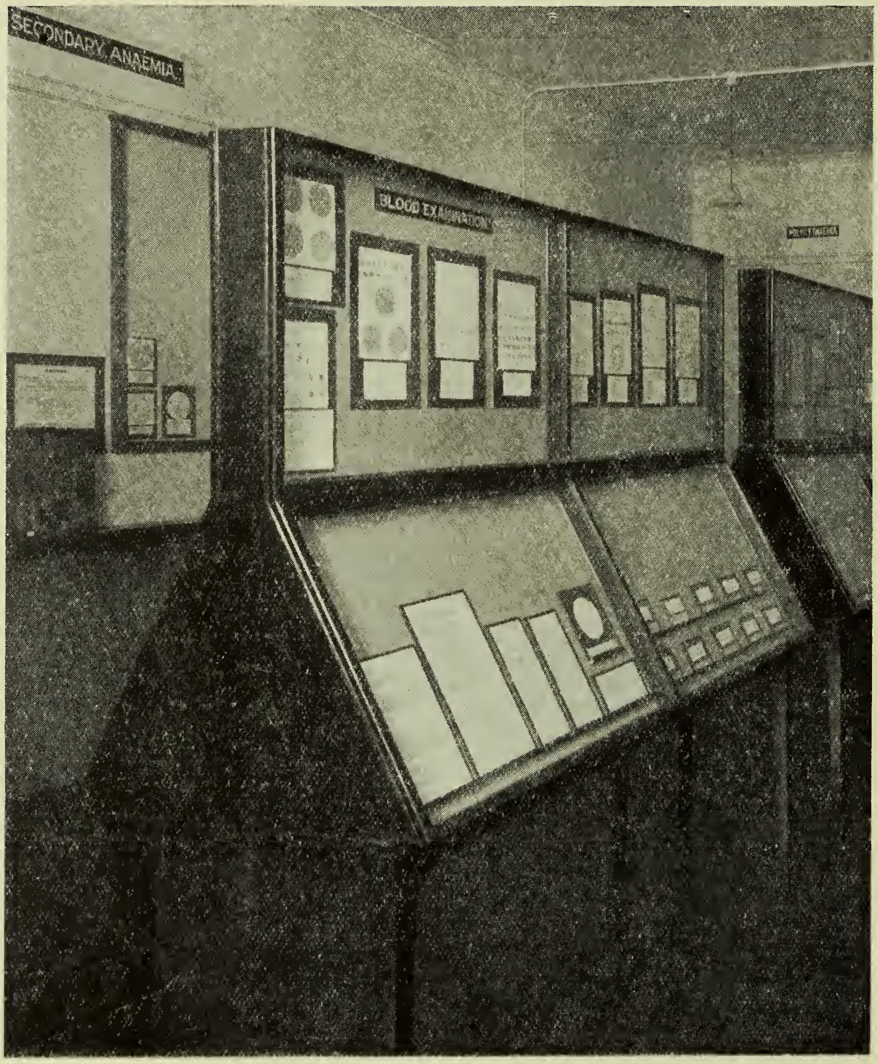

Part of Hall XVII, Third Floor
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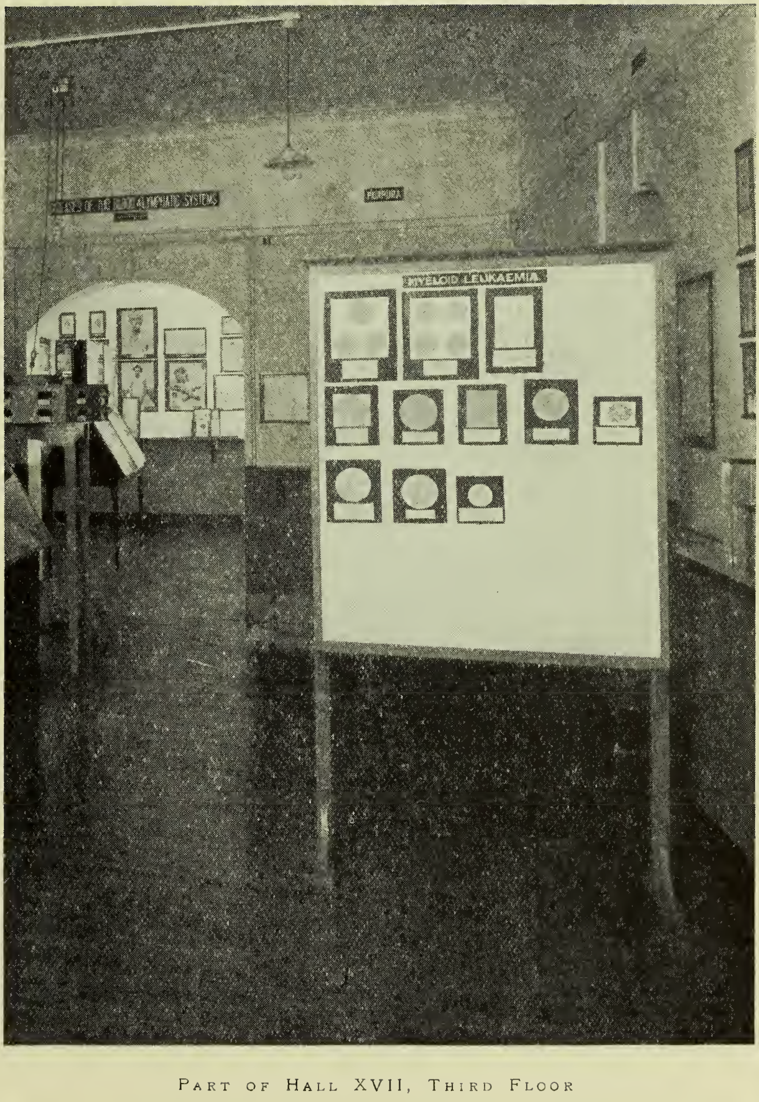

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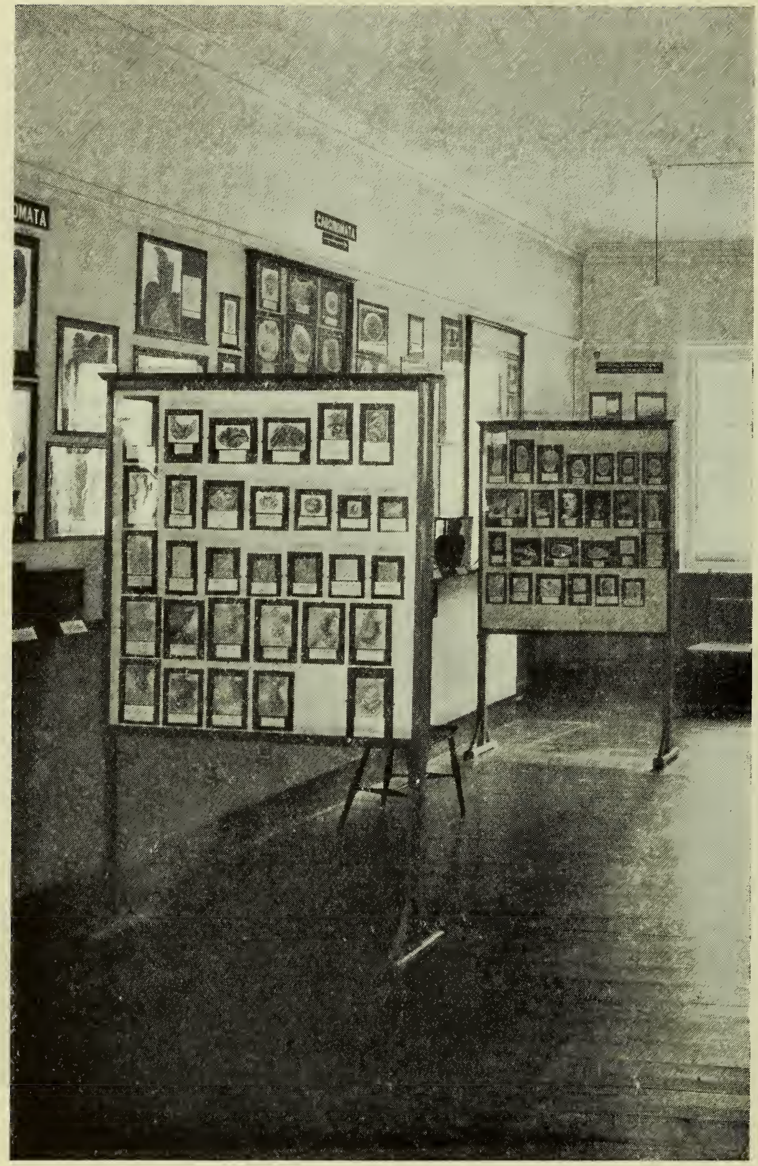

PART OF HALL XVIII, THIRD FLOOR
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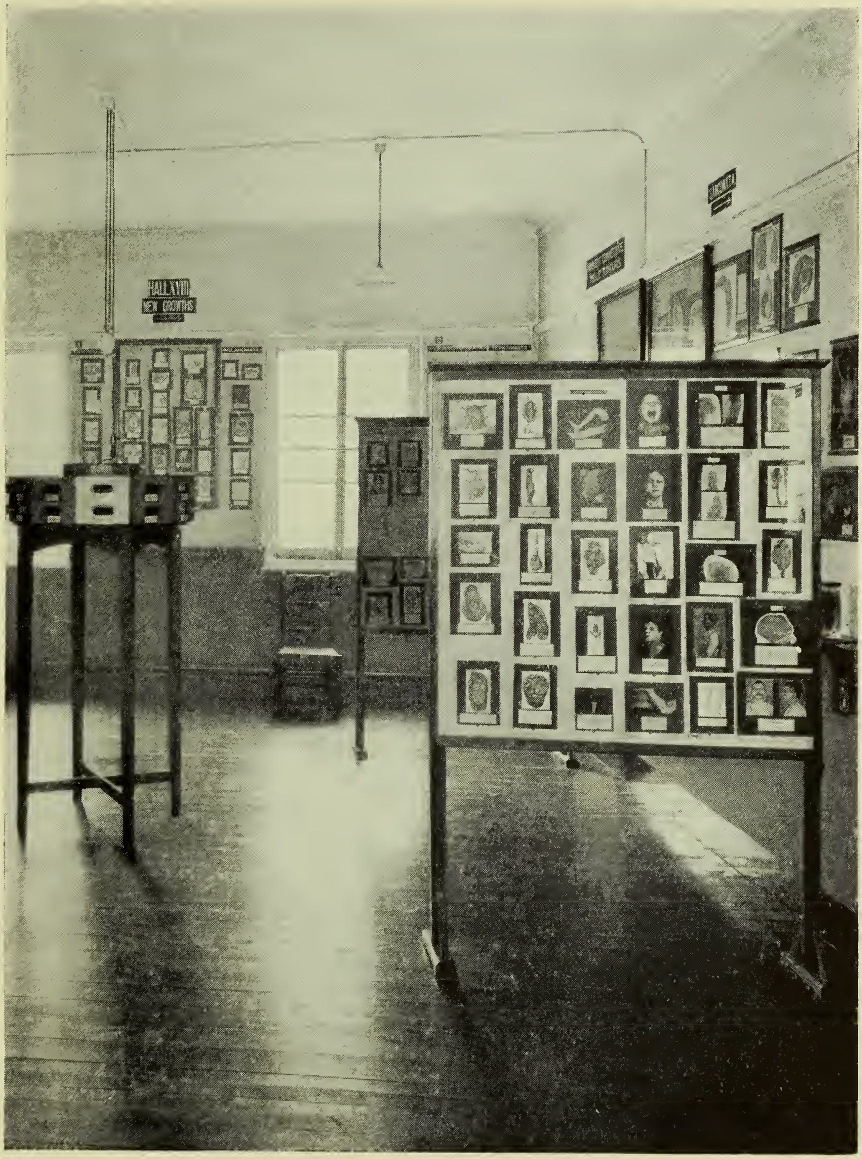

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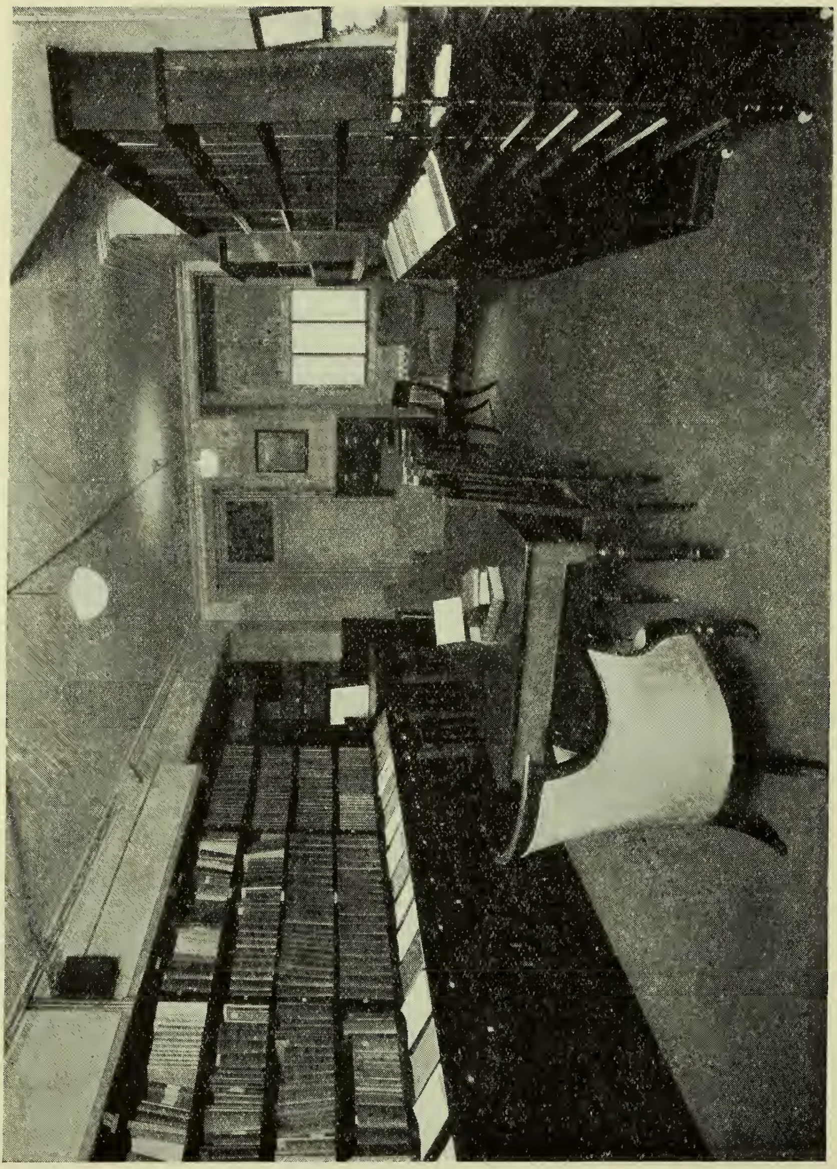

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1915

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31. A Note on the Solubility of Malarial Pigment — A. C. Stevenson, M.B., D.P.H.

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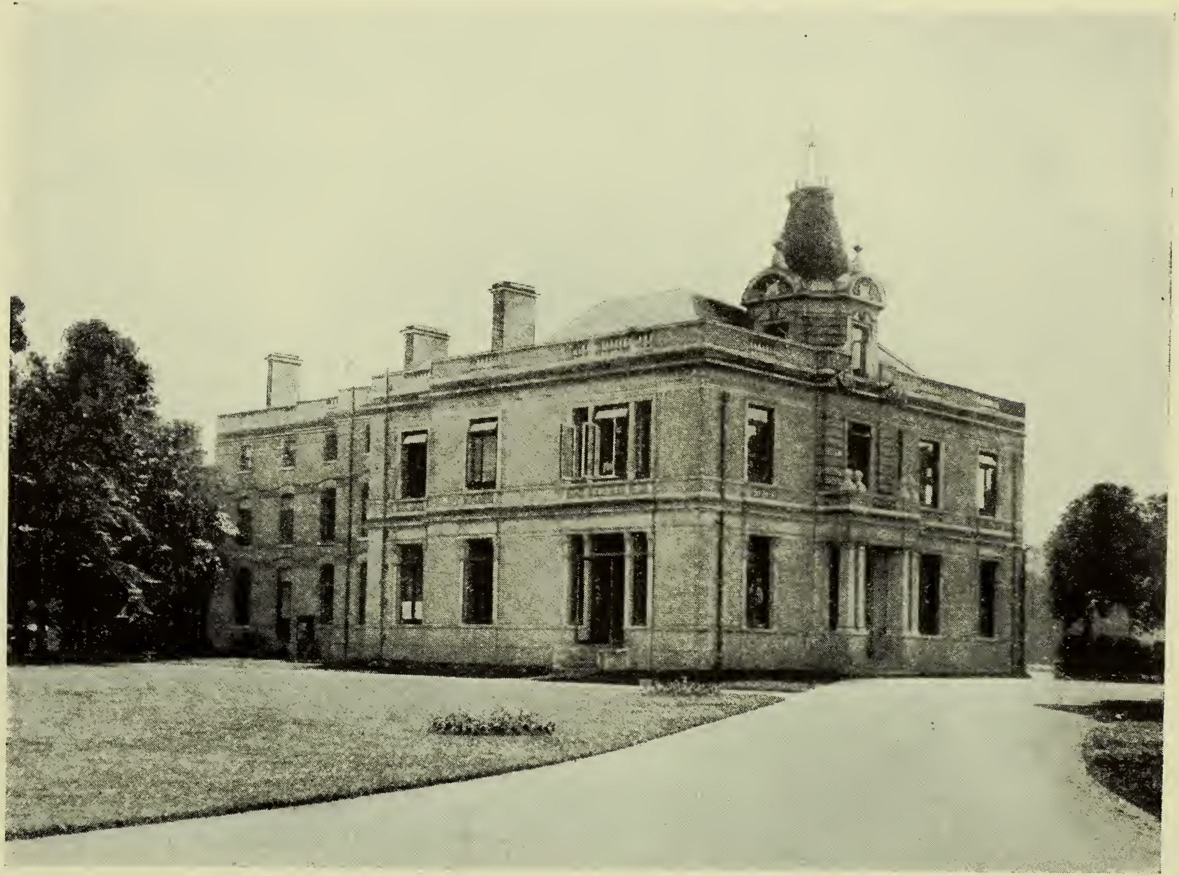

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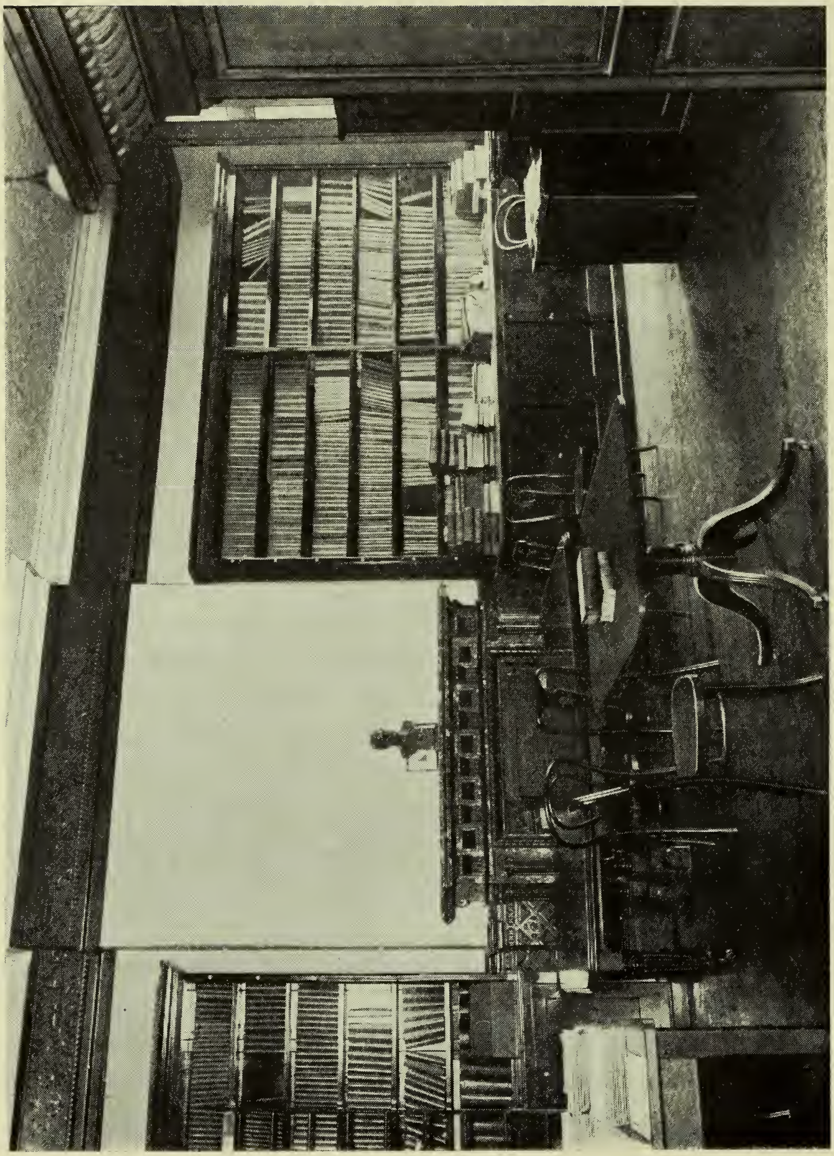

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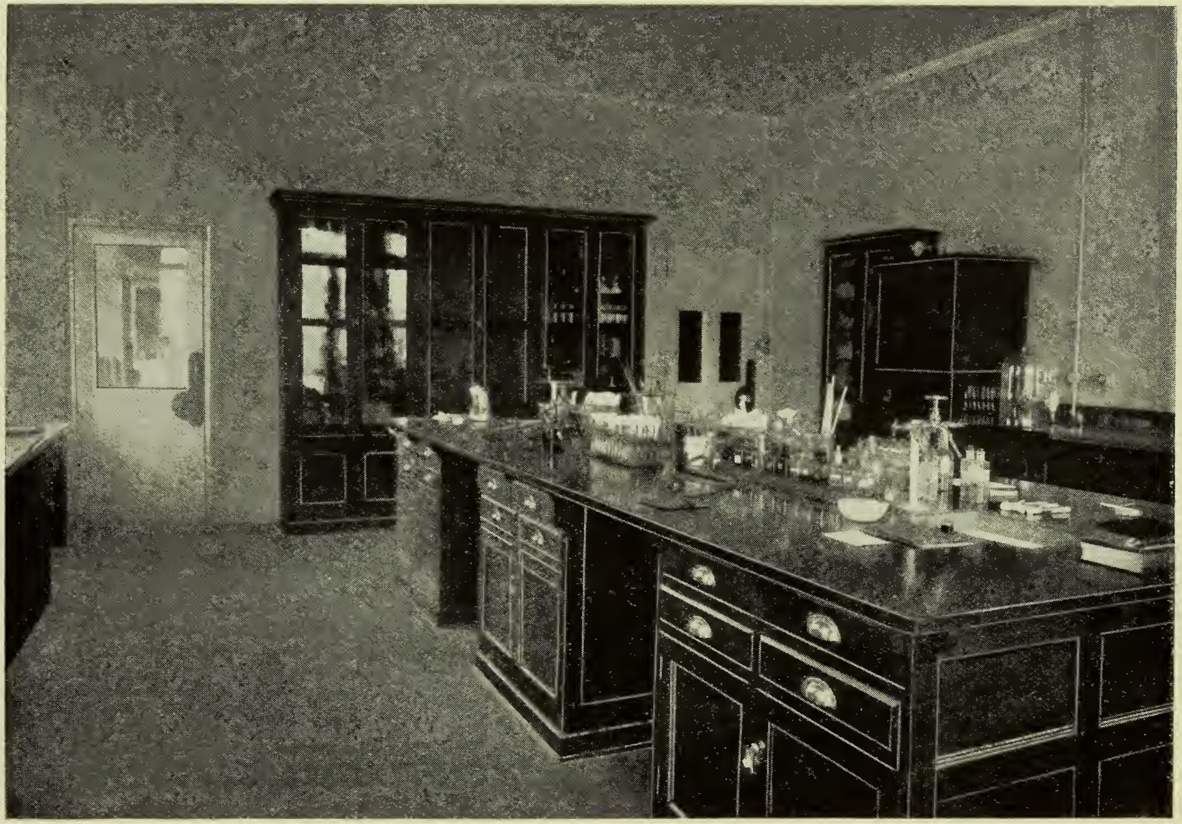

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45. β-Iminazolylethylamine, a Depressor Constituent of Intestinal Mucosa—G. Barger, M.A., D.Sc., and H. H. Dale, M.A., M.D.
46. The Physiological Action of β-Iminazolylethylamine—H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.
47. The Action of Rubber on Mercurial Antiseptic Solutions—A. T. Glenny, B.Sc., and G. S. Walpole, B.Sc., A.I.C.
48. The Action of some Isoquinoline Derivatives—P. P. Laidlaw, M.A., B.C.
49. The Direct Determination of Creatine in Pathological Urine—G. S. Walpole, D.Sc., F.I.C.
50. Further Observations on the Action of β-Iminazolylethylamine—H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.
51. The Physiological Action of Indolethylamine—P. P. Laidlaw, M.A., B.C.

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52. Note on a reversed Action of the Chorda Tympani on Salivary Secretion — H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.

53. Some Derivatives of 4-(or 5) Methylglyoxaline — A. J. Ewins, B.Sc.

54. The Constitution of Ergothioneine, a Betaine related to Histidine—G. Barger, M.A., D.Sc., and A. J. Ewins, B.Sc.

55. The Physiological Action of Cytisine, the Active Alkaloid of Laburnum (Cytisus-Laburnum) — H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.

56. A simple Coagulometer — H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.

57. The Constitution and Synthesis of Damascene, the Alkaloid of Nigella Damascena — A. J. Ewins, B.Sc.

58. Immunity of Guinea-Pigs to Diphtheria Toxin, and its Effect upon the Offspring— H. J. Sudmerson, Ph.D., and A. T. Glenny, B.Sc.

59. The Significance of the Suprarenal Capsules in the Action of Certain Alkaloids —H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.

60. A Method of standardising Pituitary (Infundibular) Extracts — H. H. Dale, M.A., M.D., and P. P. Laidlaw, M.A., B.C.

61. The Fate of Indolethylamine in the Organism—A. J. Ewins, B.Sc., and P. P. Laidlaw, M.A., B.C.

62. The Constitution of Cytisine, the Alkaloid of Cytisus-Laburnum, Part I. The Synthesis or α-Cytisolidine and of β-Cytisolidine — A. J. Ewins, B.Sc.

63. The Synthesis of some new Dimethyltetrahydroquinolines—A. J. Ewins, B.Sc., and H. King, M.Sc.

64. The Identity of Trimethylhistidine (Histidine Betaine) from Various Sources — G. Barger, M.A., D.Sc., and A. J. Ewins, B.Sc.

65. The use of Litmus Paper as a Quantitative Indicator of Reaction — G. S. Walpole, D.Sc., F.I.C.

66. A Modification of Diphtheria Antitoxin—A. T. Glenny, B.Sc.

67. On the Action of Ergotoxine with special Reference to the Existence of Sympathetic Vasodilators — H. H. Dale, M.A., M.D.

68. The Effect of Varying Tonicity on the Anaphylactic and other Reactions of Plain Muscle — H. H. Dale, M.A., M.D.

69. Gas Electrode for General Use—G. S. Walpole, D.Sc., F.I.C.

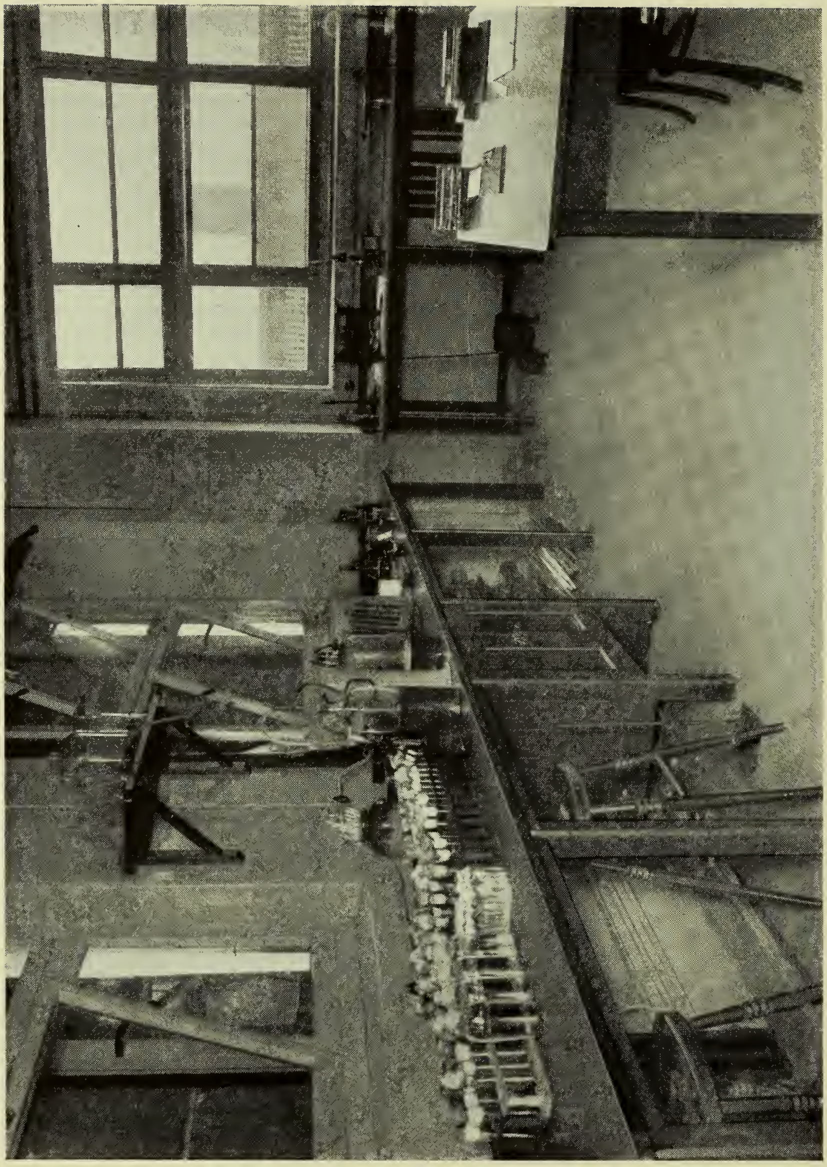
70. The Rate of Reproduction of Various Constituents of the Blood of an Immunised Horse after a large Bleeding — R. A. O'Brien, M.D.

71. Some Examples of the Effect of Asymmetric Nitrogen Atoms on Physiological Activity—P. P. Laidlaw, M.A., B.C.

72. Brechungsexponenten von Solen und Gelen der Gelatine —G. S. Walpole, D.Sc., F.I.C.

73. The Effect of Repeated Bleedings on the Blood Constituents of Immunised Horses—R. A. O'Brien, M.D.

74. The Reversal of "Irreversible" Hydrosols aggregated by Traces of "Protective" Colloids — G. S. Walpole, D.Sc., F.I.C.



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75. Acetylcholine, a new Active Principle of Ergot — A. J. Ewins, B.Sc.

76. A new (?) Strongyle causing Parasitic Gastritis in a Goat — J. B. Buxton, F.R.C.V.S., D.V.H.

77. Preliminary Report on the Etiology of Cat Influenza—J. B. Buxton, F. R. C. V. S., D.V.H.

78. An Improved Hydrogen Electrode—G. S. Walpole, D.Sc., F.I.C.

79. Herzig and Meyer's Reaction applied to Proteins and Amino-acids—J. H. Burn, B.Sc.

80. The Effect of an Injection of Mallein on the Serum Diagnosis of Glanders—J. B. Buxton, F.R.C.V.S., D.V.H.

81. Diagrammatic Co-ordination of Phenomena relating to Aggregation of Sols—G. S. Walpole, D.Sc., F.I.C.

82. The Constitution of Pseudo-muscarine ("Synthetic Muscarine")—A. J. Ewins, B.Sc.

83. Some new Physiologically active Derivatives of Choline —A. J. Ewins, D.Sc.

84. On suggested Formulæ connecting Dosage and Death Time—A. T. Glenny, B.Sc.

85. Some Further Experiments in the Prevention of Bovine Epizootic Abortion — J. B. Buxton, F.R.C.V.S., D.V.H.

86. The Effect of Dilution on the Hydrogen Potentials of Acetic Acid and "Standard Acetate" Solutions — G. S. Walpole, D.Sc., F.I.C.

87. Hydrogen Potentials of Mixtures of Acetic Acid and Sodium Acetate — G. S. Walpole, D.Sc., F.I.C.

88. The Action of Conessine and Holarrhenine, the Alkaloids of Holarrhena Congolensis, and also of Oxyconessine—J. H. Burn, B.Sc.

89. Notes on Regulator Mixtures, Recent Indicators, etc., Part II. — G. S. Walpole, D.Sc., F.I.C.

90. The Alkaloids of Quebracho Bark, Part I. The Constitution of Aspidospermine — A. J. Ewins, D.Sc.

91. The Action of certain Esters and Ethers of Choline and their Relation to Muscarine —H. H. Dale, M.D., F.R.S.

92. Hermann's Phenomenon—G. S. Walpole, D.Sc., F.I.C.

93. The Action of certain Quarternary Ammonium Bases — J. H. Burn, B.A., and H. H. Dale, M.D., F.R.S.

94. Counter Diffusion in Aqueous Solution — G. S. Walpole, D.Sc., F.I.C.

95. (1) Notes on Collodion Membranes for Ultrafiltration and Pressure Dialysis — G. S. Walpole, D.Sc., F.I.C.

(2) Detection and Concentration of Antigens by Ultrafiltration, Pressure Dialysis, etc., with Special Reference to Diphtheria and Tetanus Toxins—A. T. Glenny, B.Sc., and G. S. Walpole, D.Sc., F.I.C.

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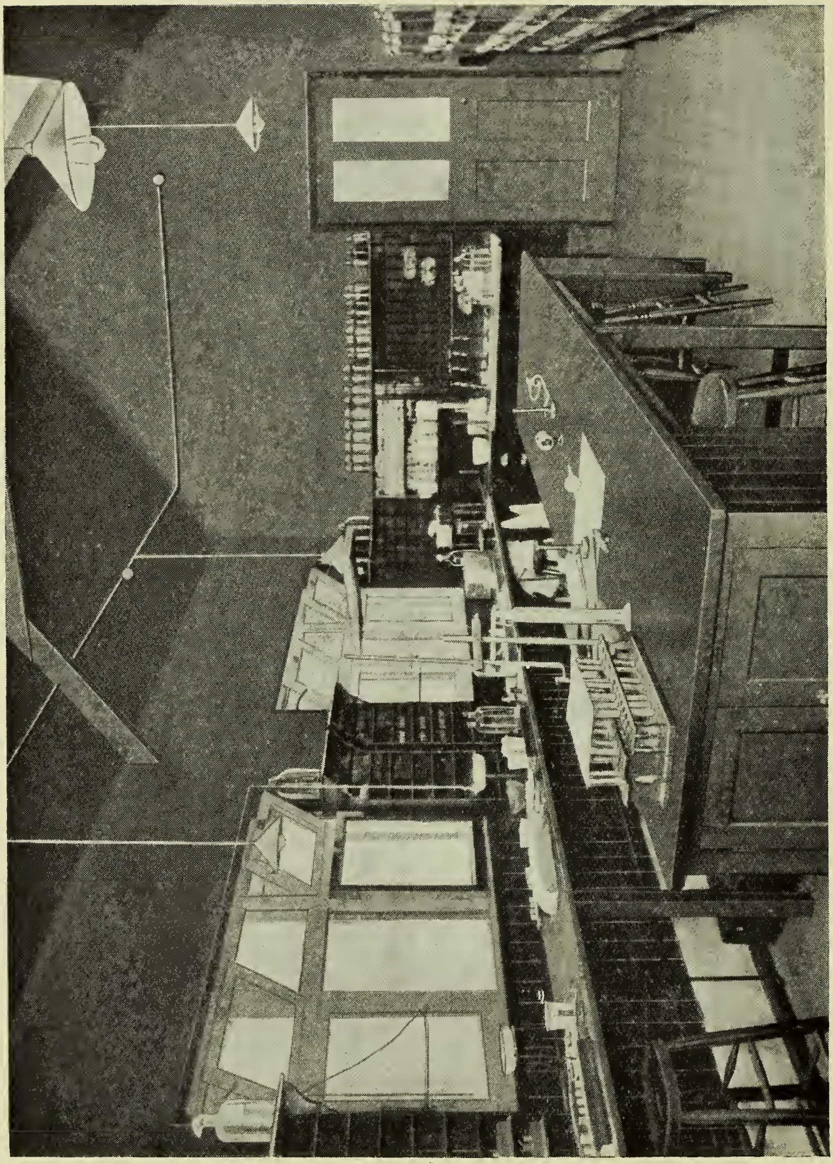
96. The Testing of Diphtheria Toxin and Antitoxin by Intracutaneous Injection into Guinea-pigs — A. T. Glenny, B.Sc., and K. Allen

97. The Standardisation of Tuberculin — A. J. Eagleton, M.D., M.R.C.P., M.R.C.S.

97a. Action of Anæsthetics on Respiratory Centre — J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.

98. The Virulence of Diphtheria-like Organisms — A. J. Eagleton, M.D., M.R.C.P., M.R.C.S., and E. M. Baxter, M.Sc.



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99. The Schick Reaction and Diphtheria Prophylactic Immunisation with Toxin-Antitoxin Mixtures—A. T. Glenny, B.Sc., K. Allen, and R. A. O'Brien, C.B.E., M.D., D.P.H.

100. Notes on the Production of Immunity to Diphtheria Toxin—A. T. Glenny, B.Sc., and H. J. Sudmerson, Ph.D.

101. Air Carriage of Pathogenic and other Organisms—J. B. Buxton, F.R.C.V.S., and H. R. Allen, M.R.C.V.S.

102. The Active Immunisation of Horses against Tetanus—J. B. Buxton, F.R.C.V.S.

103. The Virulence of Diphtheria-like Organisms: Further Note—A. J. Eagleton, M.D., M.R.C.P., M.R.C.S., and E. M, Baxter, M.Sc.

104. Experiences with the Schick Test and Active Immunisation against Diphtheria—S. M. Copeman, F.R.S., R. A. O'Brien, C.B.E., M.D., D.P.H., A. J. Eagleton, M.D., M.R.C.P., M.R.C.S., and A. T. Glenny, B.Sc.

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105. An Apparatus for the Measurement of Small Quantities of Fluid—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.

106. The Action of Diphtheria Toxin on Mice—A. T. Glenny, B.Sc., and K. Allen

107. Active Immunity to Diphtheria in the Absence of Detectable Antitoxin—A. T. Glenny, B.Sc., and K. Allen

108. The Schick Dose of Diphtheria Toxin as a Secondary Stimulus—A. T. Glenny, B.Sc., and K. Allen

109. The Effect of Section of the Vagi on the Respiration of the Cat—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S., and E. M. Boock, B.Sc.

110. The Routine Preparation of Diphtheria Toxin—P. Hartley, D.Sc., and O. M. Hartley

111. The Value of Douglas's Medium for the Production of Diphtheria Toxin—P. Hartley, D.Sc.

112. Toxin and Reaction Changes Produced by the Diphtheria Bacillus in Culture—P. Hartley, D.Sc., and O. M. Hartley

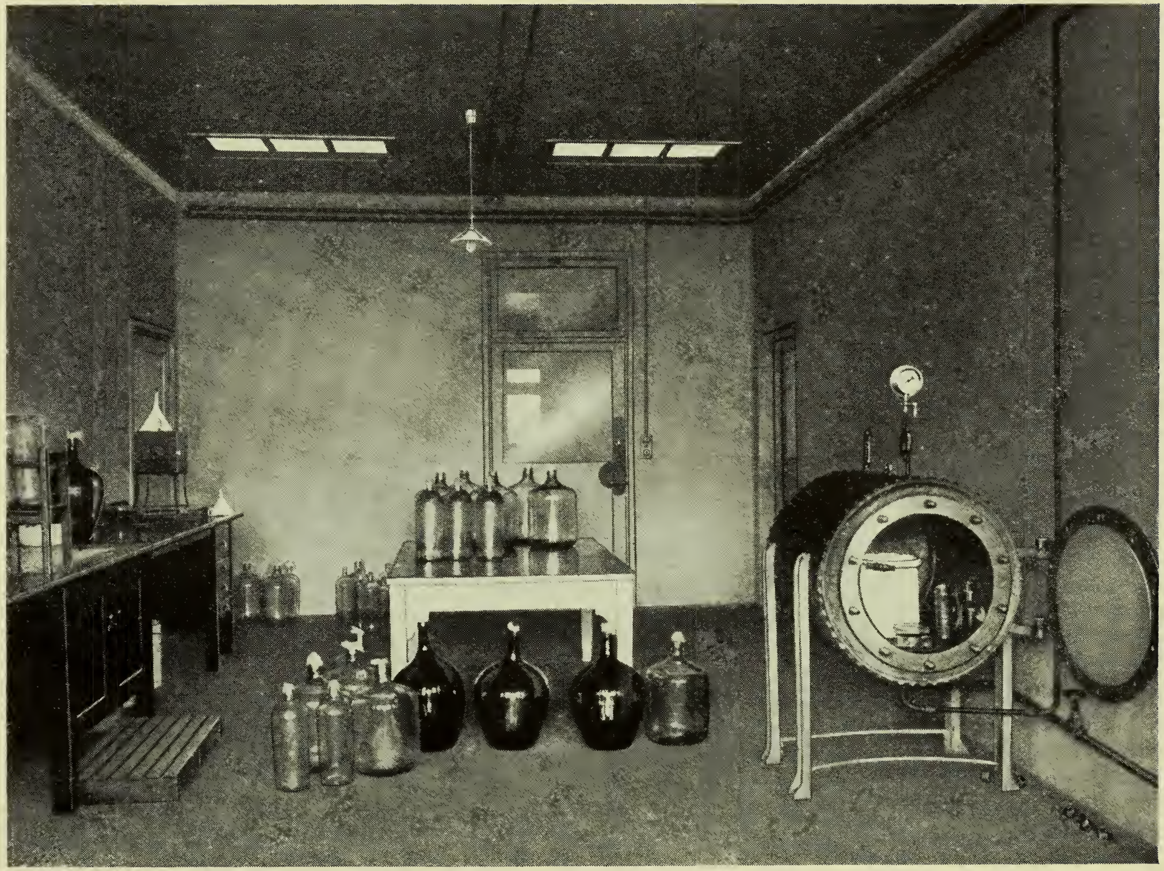
113. Duration of Passive Immunity—A. T. Glenny, B.Sc., and B. E. Hopkins

114. The Food Value of Mangolds and the Effects of Deficiency of Vitamin A on Guinea-pigs—E. M. Boock, B.Sc., and J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.

115. The Effect of Light on the Response of Frogs to Drugs—E. M. Boock, B.Sc., and J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.

116. The Desiccation of Serum and other Protein Solutions, with Special Reference to the Reagents used in the Wassermann Reaction—P. Hartley, D.Sc., A. J. Eagleton, M.D., M.R.C.P., M.R.C.S., and C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.

117. On the Identity of the Toxins produced by Serologically Different Strains of Bacillus Diphtheriæ—P. Hartley, D.Sc.



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118. THE SCHICK TEST AND ACTIVE IMMUNISATION—R. A. O'BRIEN, C.B.E., M.D., D.P.H., A. J. EAGLETON, M.D., M.R.C.P., M.R.C.S., C. C. OKELL, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., AND E. M. BAXTER, M.SC.
119. TESTING THE ANTIGENIC VALUE OF DIPHTHERIA TOXIN-ANTITOXIN MIXTURES—A. T. GLENNY, B.SC., K. ALLEN AND B. E. HOPKINS
120. A NEW FRONTAL WRITING POINT FOR USE WITH INK—J. W. TREVAN, B.SC., M.R.C.P., M.R.C.S.
121. THE EFFECT OF INSULIN ON THE RESPIRATORY EXCHANGE—H. W. DUDLEY, M.SC., P. P. LAIDLAW, M.A., B.CH., J. W. TREVAN, B.SC., M.R.C.P., M.R.C.S., AND E. M. BOOCK, B.SC.
122. DIPHTHERIA TOXIN PRODUCTION ON DOUGLAS MEDIUM — A. F. WATSON, M.SC., PH.D., AND U. WALLACE, B.A.
123. DIPHTHERIA TOXOID AS AN IMMUNISING AGENT — A. T. GLENNY, B.SC., AND B. E. HOPKINS
124. THE SEROLOGICAL CLASSIFICATION OF BACILLUS DIPHTHERIÆ—A. J. EAGLETON, M.D., M.R.C.P., M.R.C.S., AND E. M. BAXTER, M.SC.
125. DURATION OF PASSIVE IMMUNITY (PART II)—A. T. GLENNY, B.SC., AND B. E. HOPKINS
126. DURATION OF PASSIVE IMMUNITY (PART III)—A. T. GLENNY, B.SC., AND B. E. HOPKINS
127. STANDARDISATION OF TUBERCULIN—A. J. EAGLETON, M.D., M.R.C.P., M.R.C.S., AND E. M. BAXTER, M.SC.

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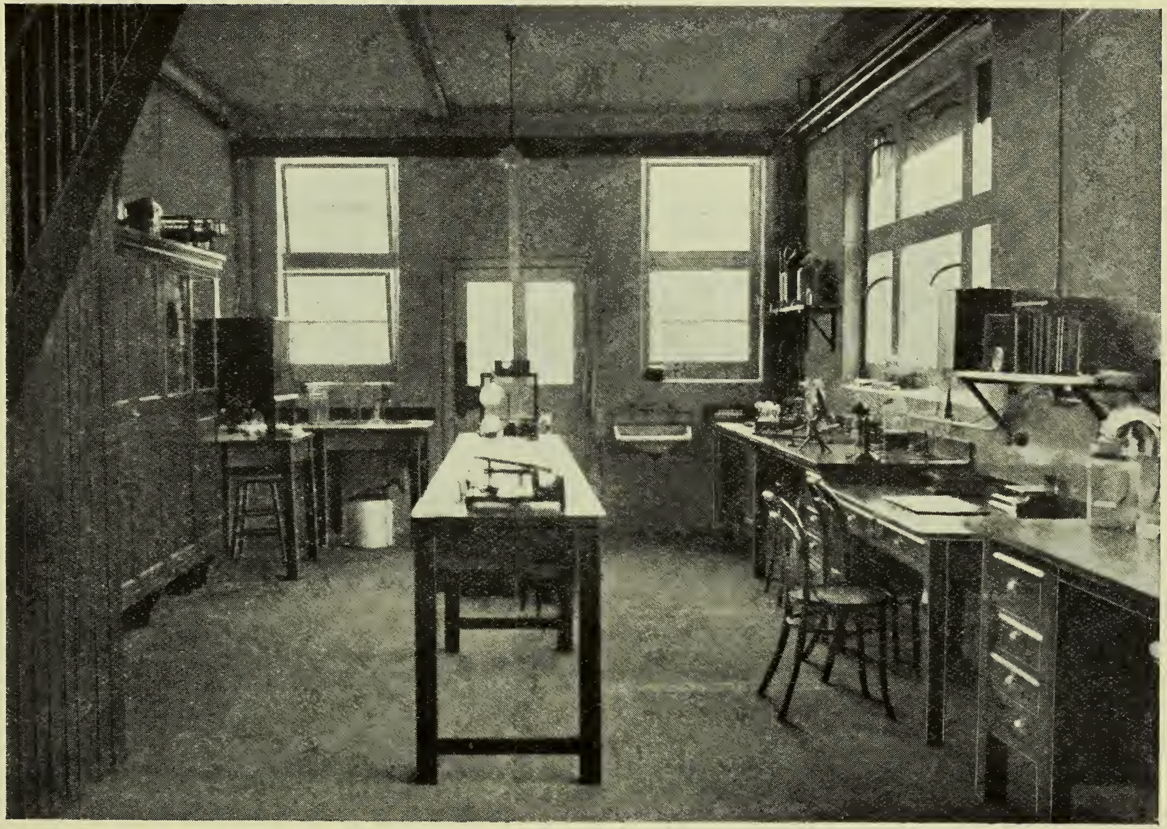
128. DURATION OF PASSIVE IMMUNITY (PART IV)—A. T. GLENNY, B.SC., AND B. E. HOPKINS
129. DIPHTHERIA: PROBLEMS IN SCHICK TESTING AND ACTIVE IMMUNISATION—R. A. O'BRIEN, C.B.E., M.D., D.P.H.
130. THE TITRATION OF DIPHTHERIA TOXIN AND ANTITOXIN BY FLOCCUATION METHODS — A. T. GLENNY, B.SC., AND C. C. OKELL, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.
131. THE RAPID CONTROL OF DIPHTHERIA OUTBREAKS IN INSTITUTIONS—C. C. OKELL, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., AND A. J. EAGLETON, M.D., M.R.C.P., M.R.C.S.
132. STANDARDISATION OF ANTI-DYSENTERY (SHIGA) SERUM—H. J. SUDMERSON, PH.D., B. F. RUNGE, B.SC., AND R. A. O'BRIEN, C.B.E., M.D., D.P.H.
133. OBSERVATIONS ON THE DIAGNOSIS OF DIPHTHERIA — F. FOORD CAIGER, M.D., D.P.H., AND R. A. O'BRIEN, C.B.E., M.D., D.P.H.
134. THE CONCENTRATION OF DIPHTHERIA TOXIN BY ACID PRECIPITATION—A. F. WATSON, M.SC., PH.D., AND U. WALLACE, B.A.
135. FURTHER NOTES ON THE MODIFICATION OF DIPHTHERIA TOXIN BY FORMALDEHYDE — A. T. GLENNY, B.SC., B. E. HOPKINS, C. G. POPE, B.SC.
136. CHANGES IN THE CULTURE MEDIUM DURING THE GROWTH OF B. DIPHTHERIA — A. F. WATSON, M.SC., PH.D., AND U. WALLACE, B.A.
137. THE DICK REACTION IN SCARLET FEVER—C. C. OKELL, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., AND E. M. BAXTER, M.SC.
138. DIPHTHERIA: PROBLEMS IN CONNECTION WITH THE SCHICK TEST AND ACTIVE IMMUNISATION—R. A. O'BRIEN, C.B.E., M.D., D.P.H.



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139. Immunisation of Animals against Infection by Vibrion Septique and Bacillus Chauvoei—H. R. Allen, M.R.C.V.S., and T. J. Bosworth, M.R.C.V.S.

140. The Fermentative Reactions of the Diphtheria Bacillus—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., and E. M. Baxter, M.Sc.

141. Bacillary White Diarrhœa of Chicks—T. Dalling, M.R.C.V.S., and H. R. Allen, M.R.C.V.S.

142. Enzootic Jaundice (Yellows) in Dogs—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., T. Dalling, M.R.C.V.S., and L. P. Pugh, B.Sc., F.R.C.V.S.

143. A Note on Hæmolysin and Hæmagglutinin with reference to the Wassermann Reaction—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., and H. J. Parish, M.D., M.R.C.P., D.P.H.

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144. Immunity, with special reference to Specificity and the Influence of Non-Specific Factors—R. A. O'Brien C.B.E., M.D., D.P.H.

145. Anærobic Infections in Animals—T. Dalling, M.R.C.V.S.

146. Active Immunisation against Diphtheria—R. A. O'Brien, C.B.E., M.D., D.P.H.

147. Leptospiral Jaundice in Dogs (Yellows)—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., T. Dalling, M.R.C.V.S., and L. P. Pugh, B.Sc., F.R.C.V.S.

148. Time of Combination of Diphtheria Toxin with Living Tissues—A. T. Glenny, B.Sc., and B. E. Hopkins

149. The Effect of Serum-Sensitiveness and Precipitin Formation upon the Efficiency of Diphtheria Toxoid and Toxin-Antitoxin Mixtures in Production—A. T. Glenny, B.Sc., B. E. Hopkins, and H. Waddington, B.Sc.

150. Immunological Notes, I-VII—A. T. Glenny, B.Sc., C. G. Pope, B.Sc., H. Waddington, B.Sc., and U. Wallace, B.A.

151. The Antigenic Effect of Intravenous Injection of Diphtheria Toxin—A. T. Glenny, B.Sc., and C. G. Pope, B.Sc.

152. The Titration of Diphtheria Toxin by the Floccuation Method—A. T. Glenny, B.Sc., and U. Wallace, B.A.

153. The Relation between Dosage and Death-Time—A. T. Glenny, B.Sc.

154. The Measurement of the Combining Power of Diphtheria Toxin and Toxoid with Antitoxin in Relation to their Antigenic Efficacy—A. T. Glenny, B.Sc., C. G. Pope, B.Sc., and H. Waddington, B.Sc.

155. Diphtheria Antitoxin in the Blood of Normal Horses—A. T. Glenny, B.Sc.

156. Variation in Immunity Response of Different Animals—A. T. Glenny, B.Sc.

157. The Dick Test in Scarlet Fever—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., and H. J. Parish, M.D., M.R.C.P., D.P.H.

158. Report on the Examination of Samples of Veterinary Tuberculin—R. A. O'Brien, C.B.E., M.D., D.P.H.

159. The Standardisation of Anti-Dysentery (Shiga) Serum-II—R. A. O'Brien, C.B.E., M.D., D.P.H., and B. F. Runge, B.Sc.
160. Discussion on Canine Jaundice; with Special Reference to Leptospiral Infection—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., L. P. Pugh, B.Sc., F.R.C.V.S., and T. Dalling, M.R.C.V.S.
161. Aeromatic Esters of Acylecgonines—W. H. Gray
162. Dick Reaction, and the Serum Treatment of Scarlet Fever—R. A. O'Brien, C.B.E., M.D., D.P.H., and C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.
163. Immunological Notes, VIII-XVI—A. T. Glenny, B.Sc., C. G. Pope, B.Sc., H. Waddington, B.Sc., and U. Wallace, B.A.
164. Research into Certain Animal Diseases—T. Dalling, M.R.C.V.S., H. R. Allen, M.R.C.V.S., J. H. Mason, M.R.C.V.S.
165. Immunisation Against Blackleg and Braxy—T. Dalling, M.R.C.V.S.
166. A Useful Preservative for Whole Blood—A. H. Baker
167. Active and Passive Immunisation Against Common Infectious Diseases—R. A. O'Brien, C.B.E., M.D., D.P.H.
168. The Reduced Sensitivity to Insulin of Rats and Mice fed on a Carbohydrate-Free, Excess-Fat Diet—H. W. Bainbridge, B.Sc.
169. Some Problems connected with the Dick Test—R. A. O'Brien, C.B.E., M.D., D.P.H., and C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.
170. The Principles of Immunity applied to Protective Inoculation Against Diphtheria—A. T. Glenny, B.Sc.

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171. Combined Schick Test and Diphtheria Prophylactic; Combined Diphtheria Scarlet Fever Prophylactic—A. T. Glenny, B.Sc., and H. Waddington, B.Sc.
172. Immunological Notes, XVII-XXIV—A. T. Glenny, B.Sc., C. G. Pope, B.Sc., H. Waddington, B.Sc., and U. Wallace, B.A.
173. Immunisation Against B. Welchii; Titration of Toxin and Antitoxin—T. Dalling, M.R.C.V.S., and J. H. Mason, M.R.C.V.S.
174. Vaccine Treatment of Canine Leptospiral Jaundice—T. Dalling, M.R.C.V.S., and C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.
175. Hæmagglutination by Horse Serum, and Jaundice in Mice—C. C. Okell, M.C. B.A., M.R.C.P., M.R.C.S., D.P.H., and G. I. Steed, B.Sc.
176. Veterinary Biological Products; Their Standardisation and Application—T. Dalling, M.R.C.V.S., H. R. Allen, M.R.C.V.S., and J. H. Mason, M.R.C.V.S.
177. The Micrometer Syringe—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.
178. The Standardisation of Tuberculin and the Precipitin Test—C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., H. J. Parish, M.D., M.R.C.P., D.P.H., R. A. O'Brien, C.B.E., M.D., D.P.H., G. Dreyer, C.B.E., M.A., M.D., F.R.S., R. L. Vollum, D.Phil., S. Lyle Cummins, C.B., C.M.G., M.D., N.U.I., and J. B. Buxton, M.A., F.R.C.V.S.
179. Active Immunisation Against Diphtheria; The Present Position—R. A. O'Brien, C.B.E., M.D., D.P.H.

180. Diphtheria and Scarlet Fever in Relation to School Medical Officers — R. A. O'Brien, C.B.E., M.D., D.P.H.

181. Scarlet Fever; Dick and Schultz-Charlton Tests, Active and Passive Immunity —R. A. O'Brien, C.B.E., M.D., D.P.H.

182. The Action of Adrenaline and Ergotamine on the Uterus of the Rabbit—J. H. Gaddum, B.A., M.R.C.S., L.R.C.P.

183. Discussion on the Modern Control of Infectious Diseases—R. A. O'Brien, C.B.E., M.D., D.P.H.

184. A Modification of the Deflection Balance for Use in Biochemical Laboratories—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S.

185. The Estimation of Calcium in Blood Serum—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S., and H. W. Bainbridge, B.Sc.

186. Lamb Dysentery—T. Dalling, M.R.C.V.S.

187. The Standardisation of Insulin by the Determination of the Convulsive Dose for Mice—J. W. Trevan, B.Sc., M.R.C.P., M.R.C.S., and E. M. Boock, B.Sc.

188. Immunity Produced by the Schick Test—R. A. O'Brien, C.B.E., M.D., D.P.H.

189. A Note on the Isolation of Virulent Diphtheria Bacilli from Wounds of Horses—H. J. Parish, M.D., M.R.C.P., D.P.H., and C. C. Okell, M.C., B. A., M. R. C. P., M. R. C. S., D.P.H.

190. Relationship of Streptococci to Scarlet Fever and its Complications—R. A. O'Brien, C.B.E., M.D., D.P.H., and C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.

191. The Preparation and some Properties of Purified Diphtheria Antigen—A. F. Watson, D.Sc., Ph.D., and E. Langstaff, B.Sc.

ABSTRACTS OF PAPERS

Abs. 1. Notes on the Sachs-Georgi Reaction in Syphilis — C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H.

,, 2. A Guinea-pig Epizootic Associated with Dietary "Deficiency" — A. T. Glenny, B.Sc., and K. Allen

,, 3. Standardisation of Anti-Dysentery Serum—H. J. Sudmerson, Ph.D., and A. J. Eagleton, M.D., M.R.C.P., M.R.C.S.

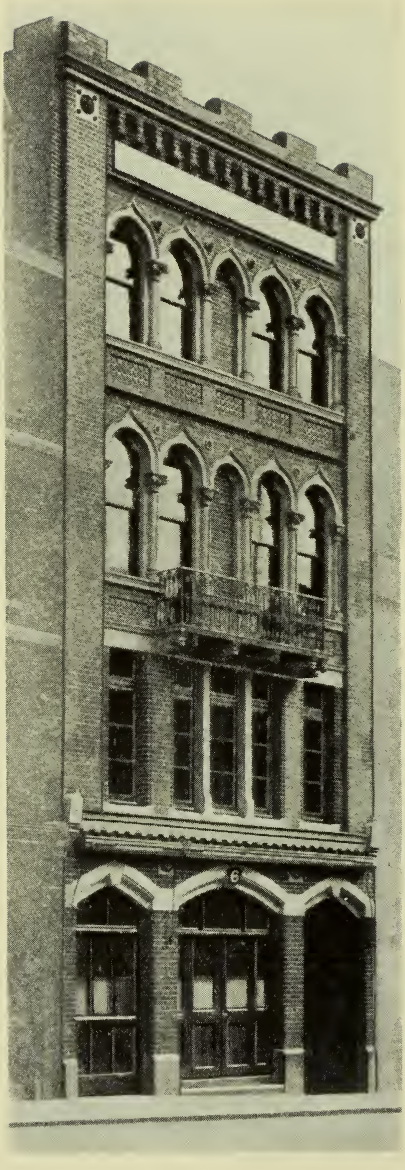
,, 4. The Active Immunisation of Horses against Tetanus —A. T. Glenny, B.Sc., and J. B. Buxton, F.R.C.V.S., D.V.H.

,, 5. Experience with the Schick Test and Active Immunisation against Diphtheria—A. J. Eagleton, M.D., M. R. C. P., M. R. C. S., C. C. Okell, M.C., B.A., M.R.C.P., M.R.C.S., D.P.H., and E. M. Baxter, M.Sc.

Abs. 6. Further Experience with Schick Test—R. A. O'Brien, C.B.E., M.A., D.P.H., A. J. Eagleton, M.D., M.R.C.P., M.R.C.S., C. C. Okell, M.C., B. A., M. R. C. P., M. R. C. S., D.P.H., and E. M. Baxter, M.Sc.

,, 7. Variations in Immunity response to different Preparations of Diphtheria Toxin — A. T. Glenny, B.Sc., C. G. Pope, B.Sc., H. Waddington, B.Sc., and U. Wallace, B.A.

,, 8. Lamb Dysentery (? B. Welchii Infection) — T. Dalling, M.R.C.V.S.



WELLCOME CHEMICAL RESEARCH LABORATORIES
King Street, London

FOUNDED IN 1896

THE CHEMICAL RESEARCH LABORATORIES

T. A. HENRY, D.SC. (Lond.), *Director*

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The investigations conducted in these laboratories have been of a most varied character and wide range, representing many branches of chemical science. They have comprised, amongst other subjects, the complete chemical examination of a large number of plants or plant products, which, on account of their reputed medicinal value or other properties, have been considered of special interest. The material thus employed, often specially collected for the purpose, includes not only many well-known drugs indigenous to Europe and North America, but also products from the African Colonies, India, Australia and the Pacific Islands.

This material has yielded a great variety of chemical compounds, and, from certain of the essential and fatty oils, products of exceptional interest have been isolated. Much time has been devoted to the isolation and characterisation of these substances and to the elucidation of their constitution.

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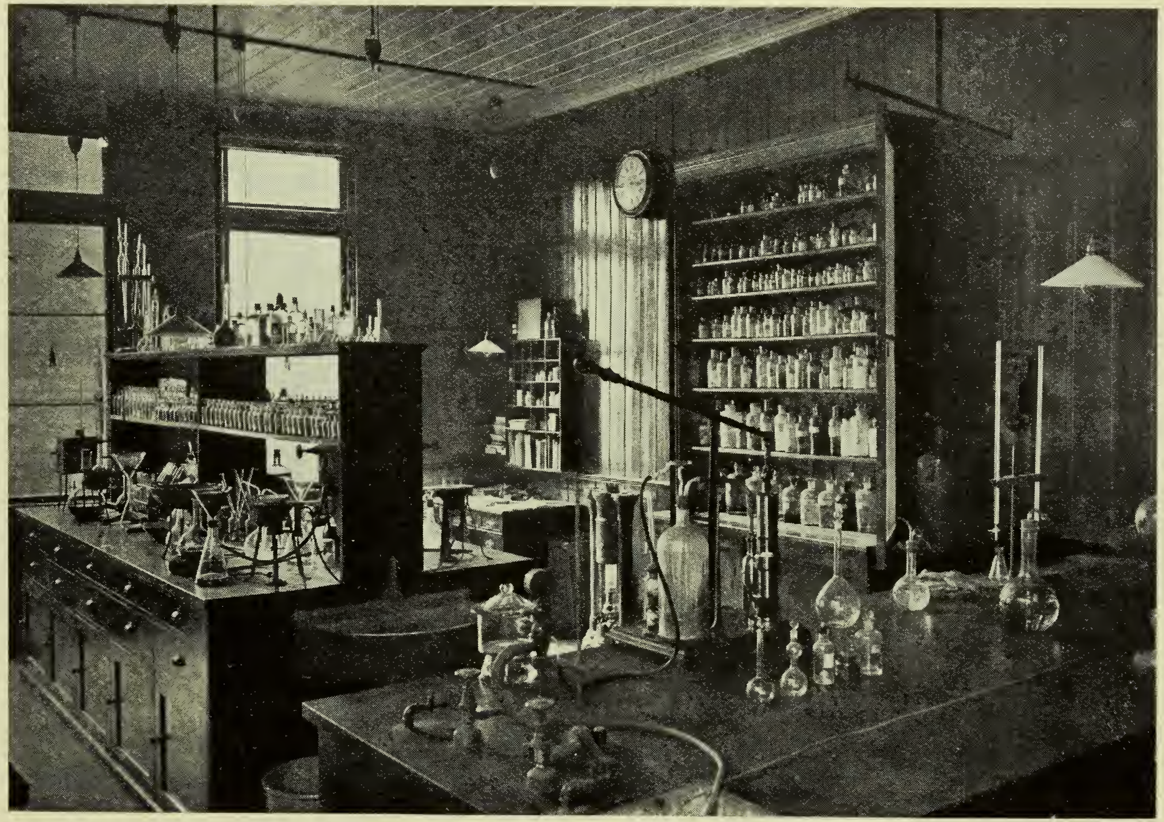

Research Laboratories, First Floor—Wellcome Chemical Research Laboratories

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SCIENTIFIC PAPERS

1897

1. Some new gold salts of Hyoscine, Hyoscyamine and Atropine—H. A. D. Jowett, D.Sc.

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2. The characters and methods of assay of the official Hypophosphites—H. A. D. Jowett, D.Sc.
3. Note on the mydriatic Alkaloids—H. A. D. Jowett, D.Sc.

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4. Preparation of Acid Phenylic Salts of Dibasic Acids—S. B. Schryver, D.Sc., Ph.D.
5. A new method for the analysis of commercial Phenols—S. B. Schryver, D.Sc., Ph.D.
6. The assay of preparations containing Pilocarpine—H. A. D. Jowett, D.Sc.

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7. Pilocarpine and the alkaloids of Jaborandi Leaves—H. A. D. Jowett, D.Sc.
8. A new glucoside from Willow Bark—H. A. D. Jowett, D.Sc.
9. The constitution of Pilocarpine, Part I—H. A. D. Jowett, D.Sc.
10. The composition and determination of Cerium Oxalate—F. B. Power, Ph.D., LL.D., and F. Shedden, B.Sc., F.I.C.
11. Researches on Morphine, Part I—S. B. Schryver, D.Sc., Ph.D., and F. H. Lees, F.I.C.
12. Observations relating to the Chemistry of the British Pharmacopœia—F. B. Power, Ph.D., LL.D.
13. Mercurous Iodide—F. B. Power, Ph.D., LL.D.
14. The composition of Berberine Phosphate—F. Shedden, B.Sc., F.I.C.
15. A contribution to the Pharmacognosy of official Strophanthus Seed—P. É. F. Perrédès, B.Sc., F.L.S.
16. The chemistry of the Jaborandi Alkaloids—H. A. D. Jowett, D.Sc., and C. R. Marshall, M.A., M.D.

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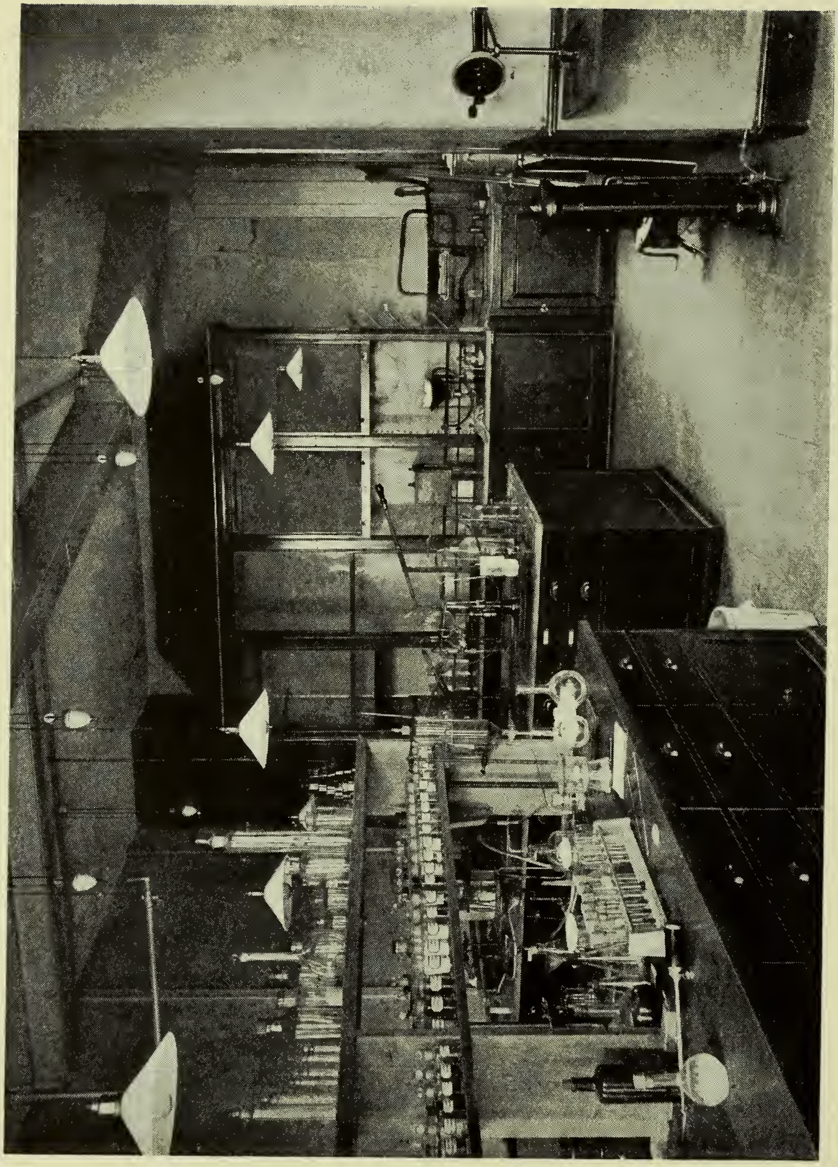
17. A new admixture of commercial Strophanthus Seed—P. É. F. Perrédès, B.Sc., F.L.S.
18. Researches on Morphine, Part II—S. B. Schryver, D.Sc., Ph.D., and F. H. Lees, F.I.C.
19. The constitution of Pilocarpine, Part II—H. A. D. Jowett, D.Sc.
20. The chemistry of the bark of Robinia Pseud-acacia, *Linn.*—F. B. Power, Ph.D., LL.D.
21. The anatomy of the bark of Robinia Pseud-acacia, *Linn.*—P. É. F. Perrédès, B.Sc., F.L.S.
22. A soluble Manganese Citrate and compounds of Manganese with Iron—F. B. Power, Ph.D., LL.D.
23. The chemical characters of so-called Iodo-tannin Compounds—F. B. Power, Ph.D., LL.D., and F. Shedden, B.Sc., F.I.C.
24. The constitution of Pilocarpine, Part III—H. A. D. Jowett, D.Sc.
25. A new Synthesis of α-Ethyltricarballylic Acid—H. A. D. Jowett, D.Sc.



Research Laboratories, Second Floor—Wellcome Chemical Research Laboratories

1902

26. The constituents of the essential oil of Asarum canadense, *Linn.*—F. B. Power, Ph.D., LL.D., and F. H. Lees, F.I.C.

27. Derivatives of Gallic Acid—F. B. Power, Ph.D., LL.D., and F. Shedden, B.Sc., F.I.C.

28. The occurrence of Salicin in different Willow and Poplar Barks—H. A. D. Jowett, D.Sc., and C. E. Potter, B.Sc.

29. The constituents of commercial Chrysarobin—H. A. D. Jowett, D.Sc., and C. E. Potter, B.Sc.

30. The constituents of an essential oil of Rue—F. B. Power, Ph.D., LL.D., and F. H. Lees, F.I.C.

31. Methyl β-Methylhexyl Ketone—F. H. Lees, F.I.C.

32. Interaction of Ketones and Aldehydes with Acid Chlorides—F. H. Lees, F.I.C.

1903

33. The anatomy of the stem of Derris uliginosa, *Benth.*—P. É. F. Perrédès, B.Sc., F.L.S.

34. The chemistry of the stem of Derris uliginosa, *Benth.*—F. B. Power, Ph.D., LL.D.

35. The constitution of Pilocarpine, Part IV—H. A. D. Jowett, D.Sc.

36. Preparation and properties of Dimethylglyoxaline and Dimethylpyrazole—H. A. D. Jowett, D.Sc., and C. E. Potter, B.Sc.

37. The electrolytic reduction of Pheno- and Naphtho-morpholones—F. H. Lees, F.I.C., and F. Shedden, B.Sc., F.I.C.

38. Chemical examination of Kó-sam Seeds (Brucea Sumatrana, *Roxb.*)—F. B. Power, Ph.D., LL.D., and F. H. Lees, F.I.C.

39. Comparative anatomy of the Barks of the Salicaceæ, Part I—P. É. F. Perrédès, B.Sc., F.L.S.

40. The constitution of Chrysophanic Acid and of Emodin—H. A. D. Jowett, D.Sc., and C. E. Potter, B.Sc.

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41. The constitution of Epinephrine—H. A. D. Jowett, D.Sc.

42. A Lævo-rotatory modification of Quercitol—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

43. The constituents of the essential oil of Californian Laurel—F. B. Power, Ph.D., LL.D., and F. H. Lees, F.I.C.

44. Some Derivatives of Umbellulone—F. H. Lees, F.I.C.

45. The constituents of Chaulmoogra Seeds—F. B. Power, Ph.D., LL.D., and F. H. Gornall, M.Sc.

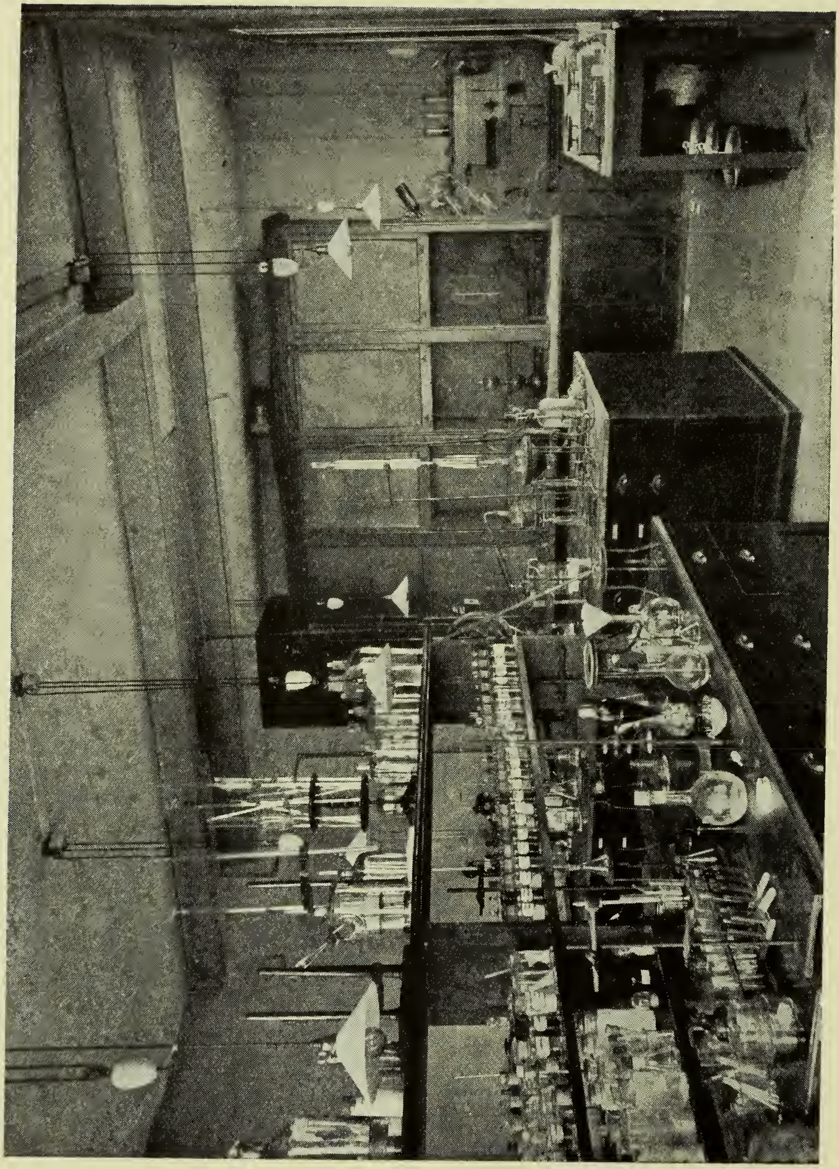
46. The constitution of Chaulmoogric Acid, Part I—F. B Power, Ph.D., LL.D., and F. H. Gornall, M.Sc.

47. Chemical examination of Cascara Bark—H. A. D. Jowett, D.Sc.

48. Chemical examination of Gymnema Leaves—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

1905

49. The relation between Natural and Synthetical Glycerylphosphoric Acids—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.



Research Laboratories, Third Floor—Wellcome Chemical Research Laboratories

50. Gynocardin, a new Cyanogenetic Glucoside—F. B. Power, Ph.D., LL.D., and F. H. Lees, F.I.C.

51. Preparation and properties of 1: 4 : 5-Trimethylglyoxaline—H. A. D. Jowett, D.Sc.

52. The constitution of Pilocarpine, Part V—H. A. D. Jowett, D.Sc.

53. The constitution of Barbaloin, Part I—H. A. D. Jowett, D.Sc., and C. E. Potter, B.Sc.

54. The constituents of the Seeds of Hydnocarpus Wightiana, *Blume*, and of Hydnocarpus anthelmintica, *Pierre*—F. B. Power, Ph.D., LL.D., and M. Barrowcliff, M.B.E., F.I.C.

55. The constituents of the Seeds of Gynocardia odorata, *R. Br.*—F. B. Power, Ph.D., LL.D., and M. Barrowcliff, M.B.E., F.I.C.

56. The Synthesis of Substances allied to Epinephrine—G. Barger, M.A., D.Sc., F.R.S., and H. A. D. Jowett, D.Sc.

57. Chemical examination of Grindelia—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

58. Chemical examination of Aethusa Cynapium, *Linn.*—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

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59. Preparation and properties of some new Tropeines—H. A. D. Jowett, D.Sc., and A. C. O. Hann.

60. The constituents of the essential oil from the fruit of Pittosporum undulatum, *Vent.*—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

61. The constitution of Umbellulone—F. Tutin, M.Sc.

62. London Botanic Gardens—P. É. F. Perrédès, B.Sc., F.L.S.

63. Chemical and physiological examination of the fruit of Chailletia toxicaria—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

64. Chemical examination of Eriodictyon—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

65. The botanical characters of some Californian species of Grindelia—P. É. F. Perrédès, B.Sc., F.L.S.

66. The relation between natural and synthetical Glycerylphosphoric Acids, Part II—F. Tutin, M.Sc., and A. C. O. Hann.

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67. The constitution of Umbellulone, Part II—F. Tutin, M.Sc.

68. The reduction of Hydroxylaminodihydroumbellulone-oxime—F. Tutin, M.Sc.

69. The constitution of Chaulmoogric and Hydnocarpic Acids—M. Barrowcliff, M.B.E., F.I.C., and F. B. Power, Ph.D., LL.D.

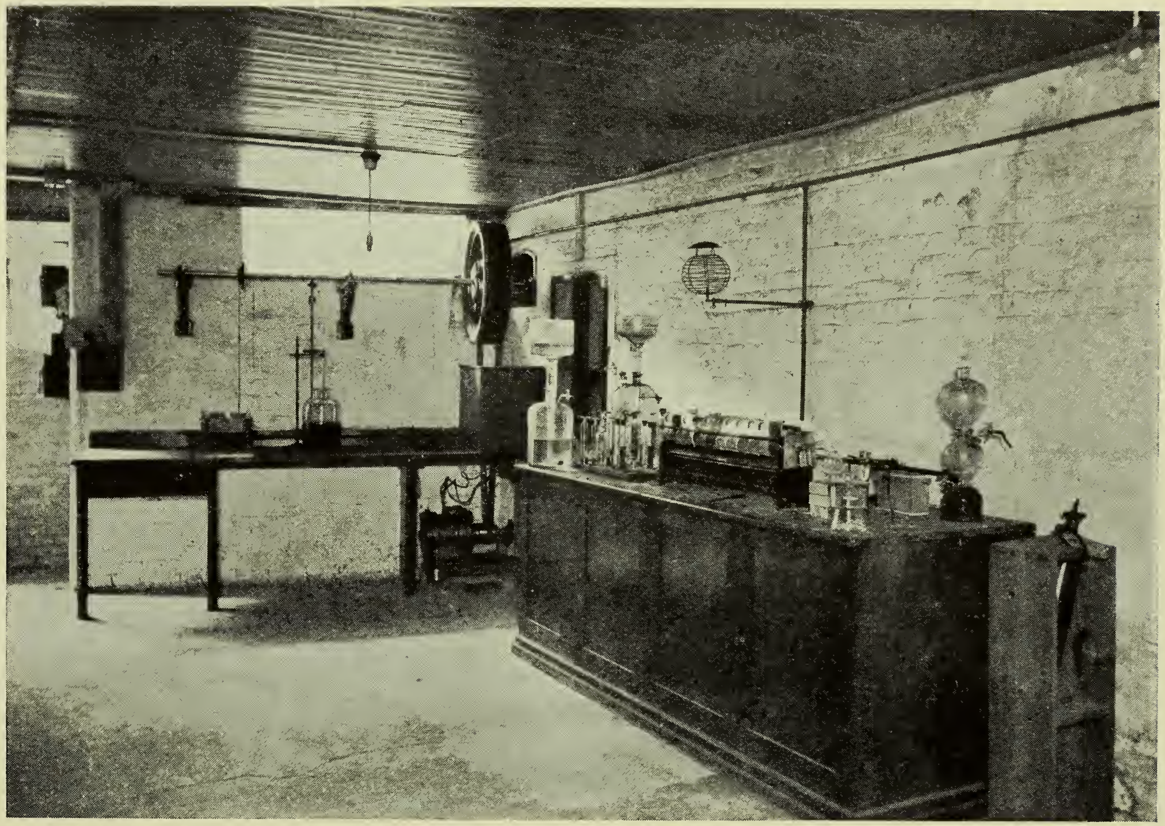
70. The constituents of the essential oil of American Pennyroyal—M. Barrowcliff, M.B.E., F.I.C.

71. The constitution of Homoeriodictyol—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

72. The interaction of Methylene Chloride and the Sodium Derivative of Ethyl Malonate—F. Tutin, M.Sc.

73. Chemical examination of the Fruit of Brucea antidysenterica, *Lam.*—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

74. Chemical examination of the barks of Brucea antidysenterica, *Lam.*, and Brucea sumatrana, *Roxb.*—A. H. Salway, D.Sc., Ph.D., and W. Thomas.



Combustion Room—Wellcome Chemical Research Laboratories

75. Chemical examination of Grindelia, Part II—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

76. Chemical examination of Lippia scaberrima, *Sonder* (" Beukess Boss ")—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

77. Chemical examination of the root and leaves of Morinda longiflora — M. Barrowcliff, M.B.E., F.I.C., and F. Tutin, M.Sc.

78. The constituents of the essential Oil of Nutmeg—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

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79. Chemical examination of Micromeria Chamissonis *(Yerba Buena)*—F. B. Power, Ph.D., and A. H. Salway, D.Sc., Ph.D.

80. The constitution of Umbellulone, Part III—F. Tutin, M.Sc.

81. The constituents of Olive Leaves—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

82. The constituents of Olive Bark—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

83. Chemical examination of Ipomœa purpurea—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

84. The characters of official Iron Arsenate—F. B. Power, Ph.D., and H. Rogerson, M.Sc., F.I.C.

85. Preparation of a soluble Ferric Arsenate—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

86. The constituents of the expressed Oil of Nutmeg—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

87. Chemical examination and physiological action of Nutmeg—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

88. Some observations regarding " Oleuropein " from Olive Leaves—F. B. Power, Ph.D., LL.D., and F. Tutin, M.Sc.

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89. Chemical examination of Eriodictyon, Part II—F. Tutin, M.Sc., and H. W. B. Clewer

90. The constituents of the bark of Prunus serotina—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

91. The constituents of the rhizome of Apocynum androsæmifolium — C. W. Moore, D.Sc., Ph.D., F.I.C.

92. *iso*-Amygdalin, and the resolution of its Hepta-acetyl Derivative—F. Tutin, M.Sc.

93. The action of Nitric Acid on the Ethers of Aromatic Hydroxyaldehydes — A. H. Salway, D.Sc., Ph.D.

94. The Synthesis of Substances allied to Cotarnine—A. H. Salway, D.Sc., Ph.D.

95. Chemical examination of Elaterium and the characters of Elaterin—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

96. The Tests for Purity of Quinine Salts—F. Tutin, M.Sc.

97. The configuration of Tropine and Ψ-Tropine and the resolution of Atropine — M. Barrowcliff, M.B.E., F.I.C., and F. Tutin, M.Sc.

98. The constituents of the Fruit of Ecballium Elaterium—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

99. Syntheses in the Epinephrine Series—F. Tutin, M.Sc., F. W. Caton, and A. C. O. Hann.

1910

100. Chemical examination of Jalap—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

101. The constituents of Rumex Ecklonianus—F. Tutin, M.Sc., and H. W. B. Clewer.

102. The constituents of Colocynth—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

103. The constituents of Red Clover Flowers—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

104. Chemical examination of Pumpkin Seed—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

105. Chemical examination of Watermelon Seed—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

106. Chemical examination of Ornithogalum thyrsoides—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

107. The constituents of the flowers of Trifolium incarnatum—H. Rogerson, M.Sc., F.I.C.

108. The constituents of the leaves of Prunus serotina—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

109. Synthesis of Cotarnine—A. H. Salway, D.Sc., Ph.D.

110. Note on Gynocardin and Gynocardase—C. W. Moore, D.Sc., Ph.D., F.I.C., and F. Tutin, M.Sc.

111. Chemical examination of the tuberous root of Ipomœa Horsfalliæ—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

112. The resolution of Benzoyloscine—F. Tutin, M.Sc.

113. Note on the constitution of α-Elaterin—C. W. Moore, D.Sc., Ph.D., F.I.C.

114. The constituents of Leptandra—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

115. The constitution of Eriodictyol, of Homoeriodictyol, and of Hesperitin—F. Tutin, M.Sc.

116. The Synthesis of 2 : 4 : 6 - Trimethoxyphenyl - 3 : 4 - dimethoxystyryl Ketone—F. Tutin, M.Sc.

117. The constituents of Gelsemium—C. W. Moore, D.Sc., Ph.D., F.I.C.

118. Syntheses in the Epinephrine Series, Part II—F. Tutin, M.Sc.

119. The absorption spectra of some substituted Pyrazines and their Salts—F. Tutin, M.Sc., and F. W. Caton

120. Action of Sodium Amalgam on Methylene Ethers—A. H. Salway, D.Sc., Ph.D.

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121. The constituents of the rhizome of Iris versicolor—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

122. Chemical examination of the root of Lasiosiphon Meissnerianus—H. Rogerson, M.Sc., F.I.C.

123. The orientation of the Nitro-group in Nitromyristicinic Acid—A. H. Salway, D.Sc., Ph.D.

124. *a*-*p*-Hydroxy-*m*-methoxyphenylamine, and the resolution of *a*-*p*-Hydroxyphenylethylamine—C. W. Moore, D.Sc., Ph.D., F.I.C.

125. The constituents of Withania somnifera—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

126. The constituents of Rhubarb—F. Tutin, M.Sc., and H. W. B. Clewer.

127. The constituents of Bryony Root—F. B. Power, Ph.D., LL.D., and C. W. Moore, D.Sc., Ph.D., F.I.C.

128. The constitution of Scopoletin—C. W. Moore, D.Sc., Ph.D., F.I.C.

129. The constituents of the bulb of Buphane disticha—F. Tutin, M.Sc.

130. Some Derivatives of Gelsemine—C. W. Moore, D.Sc., Ph.D., F.I.C.

131. Synthesis of 4 : 6-Dimethoxy-2-β-methylaminoethylbenzaldehyde—A. H. Salway, D.Sc., Ph.D.

132. Chemical examination of Oenanthe Crocata—F. Tutin, M.Sc.

133. The constituents of the seeds of Casimiroa Edulis—F. B. Power, Ph.D., LL.D., and T. Callan, Ph.D.

134. Chemical examination of Calabar Beans—A. H. Salway, D.Sc., Ph.D.

135. Chemical examination of the leaves of Anona muricata—T. Callan, Ph.D., and F. Tutin, M.Sc.

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136. Chemical examination of the root of Ipomœa orizabensis—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

137. The constituents of commercial Chrysarobin—F. Tutin, M.Sc., and H. W. B. Clewer

138. The proposed method of microsublimation for the detection of Aesculin and the identification of Gelsemium—F. Tutin, M.Sc.

139. Chemical examination of Scammony Root and of Scammony—F. B. Power, Ph.D., LL.D., and H. Rogerson, M.Sc., F.I.C.

140. Chemical examination of Jambul Seeds—F. B. Power, Ph.D., LL.D., and T. Callan, Ph.D.

141. The constituents of some Cucurbitaceous Plants—F. B. Power, Ph.D., LL.D.

142. Researches on the constitution of Physostigmine, Part I—A. H. Salway, D.Sc., Ph.D.

143. Chemical examination of the bark of Euonymus atropurpureus—H. Rogerson, M.Sc. F.I.C.

144. Chemical examination of the bark of Erythrophlœum Guineense—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

145. The constituents of Cluytia similis—F. Tutin, M.Sc., and H. W. B. Clewer

146. The constituents of Taraxacum Root—F. B. Power, Ph.D., LL.D., and H. Browning, M.Sc.

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147. The constituents of the rhizome and roots of Caulophyllum thalictroides—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

148. Researches on the constitution of Physostigmine, Part II—A. H. Salway, D.Sc., Ph.D.

149. The identification of Ipuranol and some allied compounds as Phytosterol Glucosides—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

150. Chemical examination of Euphorbia pilulifera—F. B. Power, Ph.D., LL.D., and H. Browning, M.Sc.

151. Chemical examination of the roots of Phaseolus multiflorus—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

152. Chemical examination of Dicoma anomala—F. Tutin, M.Sc., and W. J. S. Naunton, B.Sc.

153. The synthetical preparation of the *d*-Glucosides of Sitosterol, Cholesterol, and some Fatty Alcohols—A. H. Salway, D.Sc., Ph.D.

154. The constituents of Hops—F. B. Power, Ph.D., LL.D., F. Tutin, M.Sc., and H. Rogerson, M.Sc., F.I.C.

155. Chemical examination of Wheat Germ—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

156. The poisonous constituent of the bark of Robinia Pseud-acacia—F. B. Power, Ph.D., LL.D.

157. The constituents of Senna Leaves—F. Tutin, M.Sc.

158. Researches on the constitution of Physostigmine, Part III—A. H. Salway, D.Sc., Ph.D.

159. Some Derivatives of Oleanol—F. Tutin, M.Sc., and W. J. S. Naunton, B.Sc.

160. Observations on the constituents of Aloes—F. Tutin, M.Sc., and W. J. S. Naunton, B.Sc.

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161. Chemical examination of Sarsaparilla Root—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

162. The constituents of Solanum Angustifolium—F. Tutin, M.Sc., and H. W. B. Clewer

163. The constituents of the leaves and stems of Daviesia Latifolia—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

164. Dibenzoylglucoxylose—F. B. Power, Ph.D., LL.D., and A. H. Salway, D.Sc., Ph.D.

165. The constituents of Clematis Vitalba—F. Tutin, M.Sc., and H. W. B. Clewer

166. The constituents of the Flowers of Anthemis nobilis—F. B. Power, Ph.D., LL.D., and H. Browning, M.Sc.

167. The constituents of the Flowers of Matricaria chamomilla—F. B. Power, Ph.D., LL.D., and H. Browning, M.Sc.

168. Chemical examination of Cotton-Root Bark—F. B. Power, Ph.D., LL.D., and H. Browning, M.Sc.

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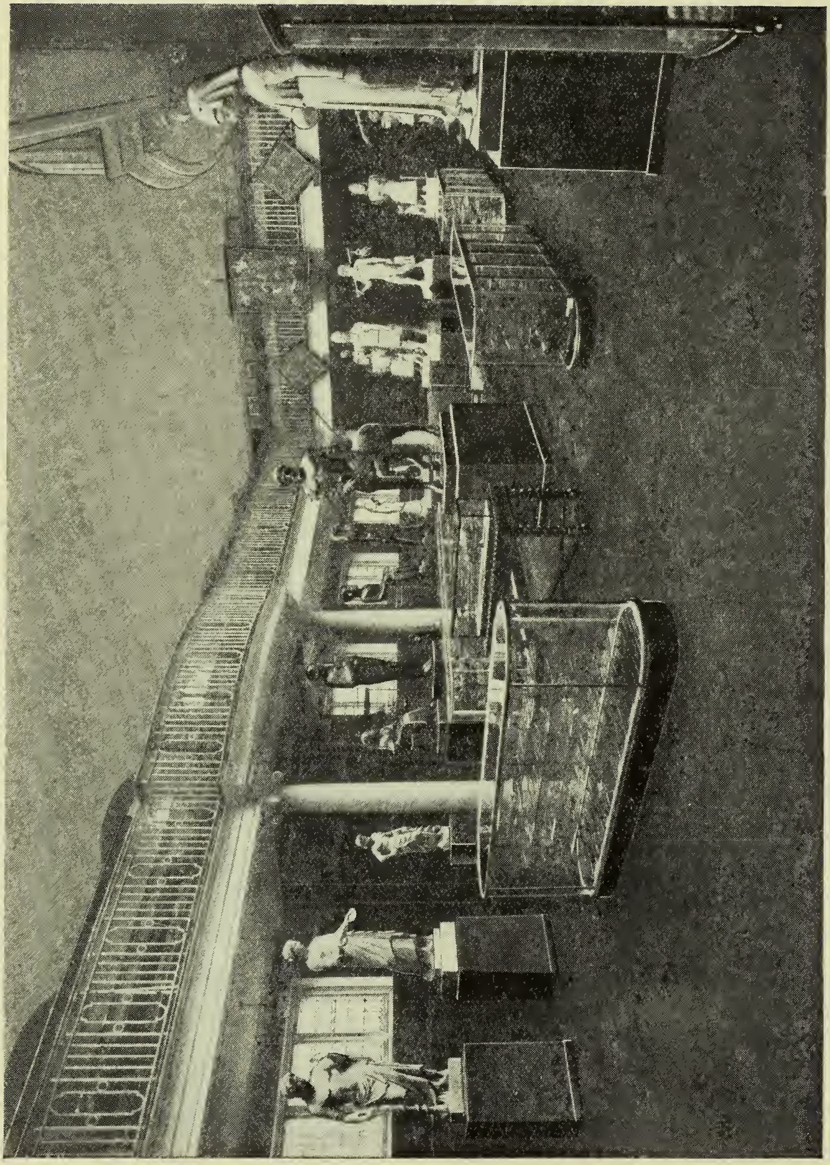
* Joint publication with the Wellcome Bureau of Scientific Research and the London School of Tropical Medicine.



Part of the Hall of Statuary—Wellcome Historical Medical Museum

FOUNDED IN 1913

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L. W. G. MALCOLM, M.SC. (Cantab.), F.R.S.E., *Conservator*

54A, Wigmore Street, Cavendish Square, LONDON

This Museum contains extensive collections of rare instruments, appliances and other objects, also pictures, sculpture, manuscripts, early printed books, etc., etc., illustrating the evolution and practice of medicine and allied sciences throughout the world from prehistoric times, and includes a section dealing with primitive medicine and surgery amongst the savage and semi-civilised peoples of to-day.

One of the central aims of the Museum is to connect the links in the chain of human experience and living things from the very beginning and to trace the genesis of the many branches of the healing art and their development. This undertaking will be illustrated by instruments, appliances and other objects connected therewith.

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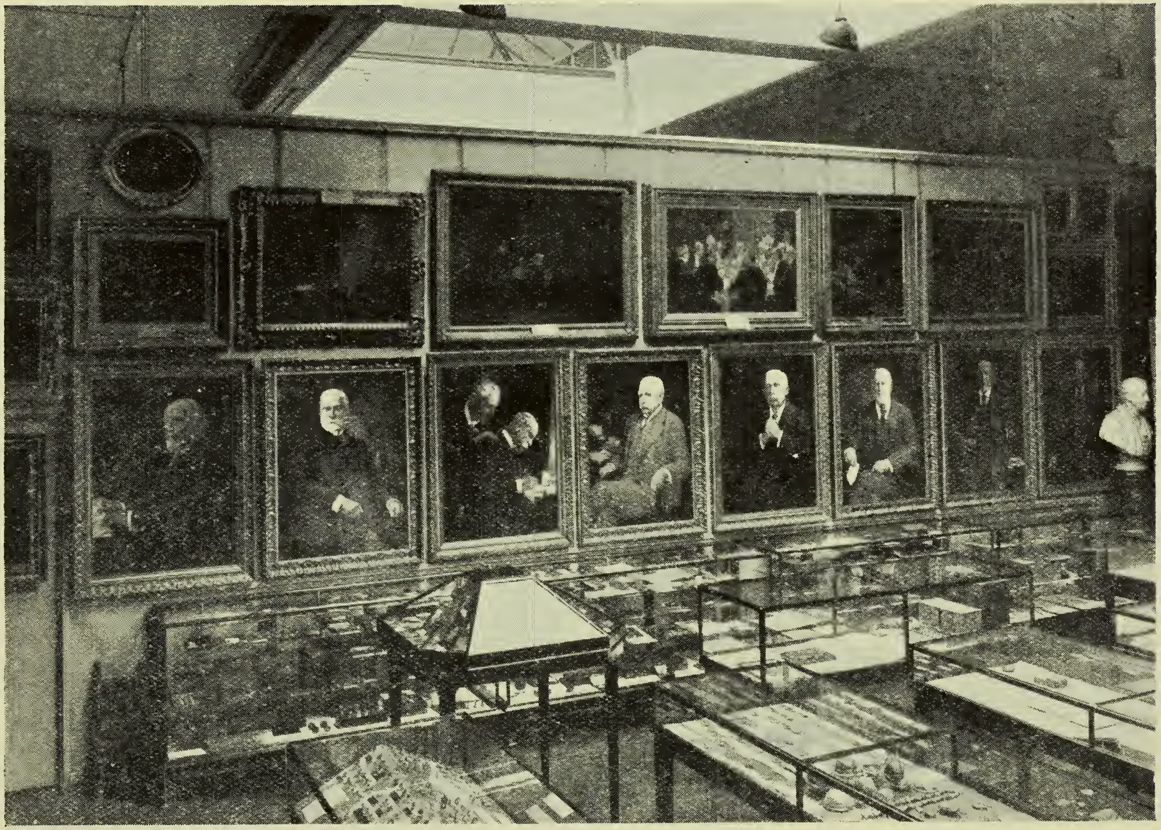

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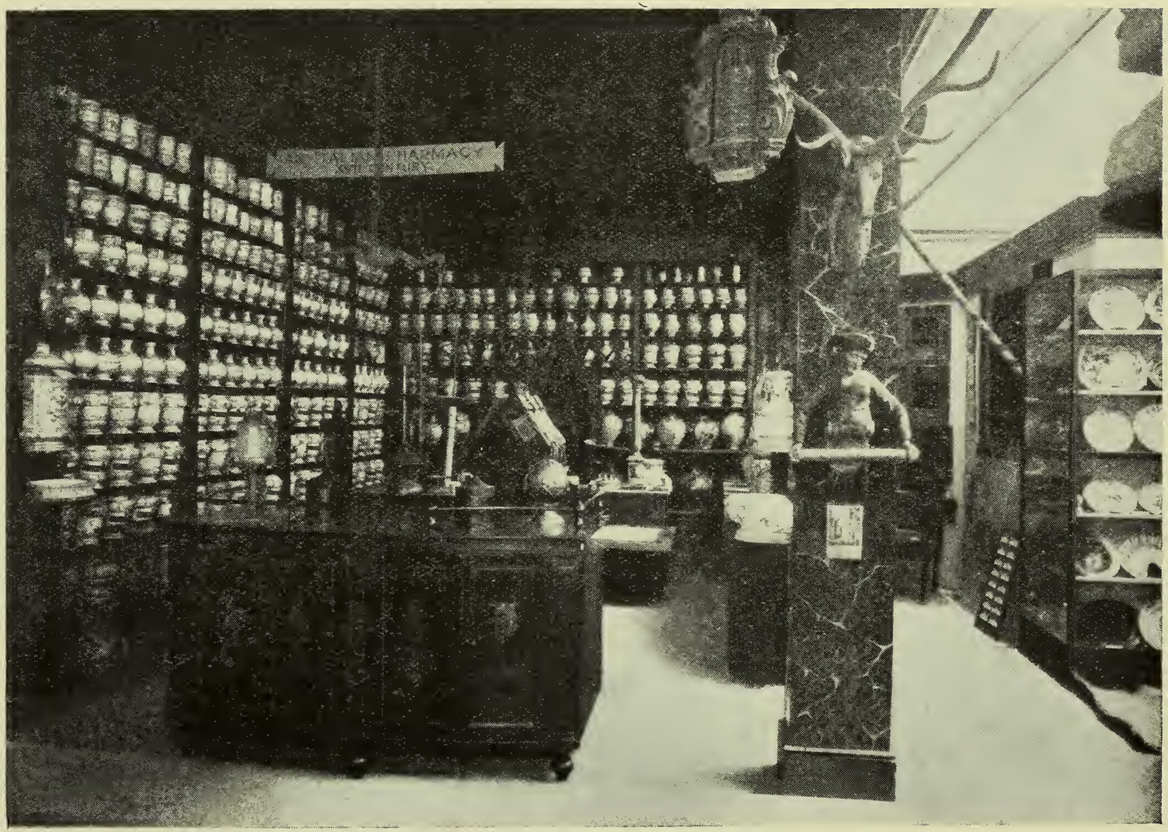

An Italian Pharmacy, XVIIth Century—Wellcome Historical Medical Museum

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2. "Magistri Salernitani nondum Cogniti." By Dr. Pietro Capparoni, 1923.
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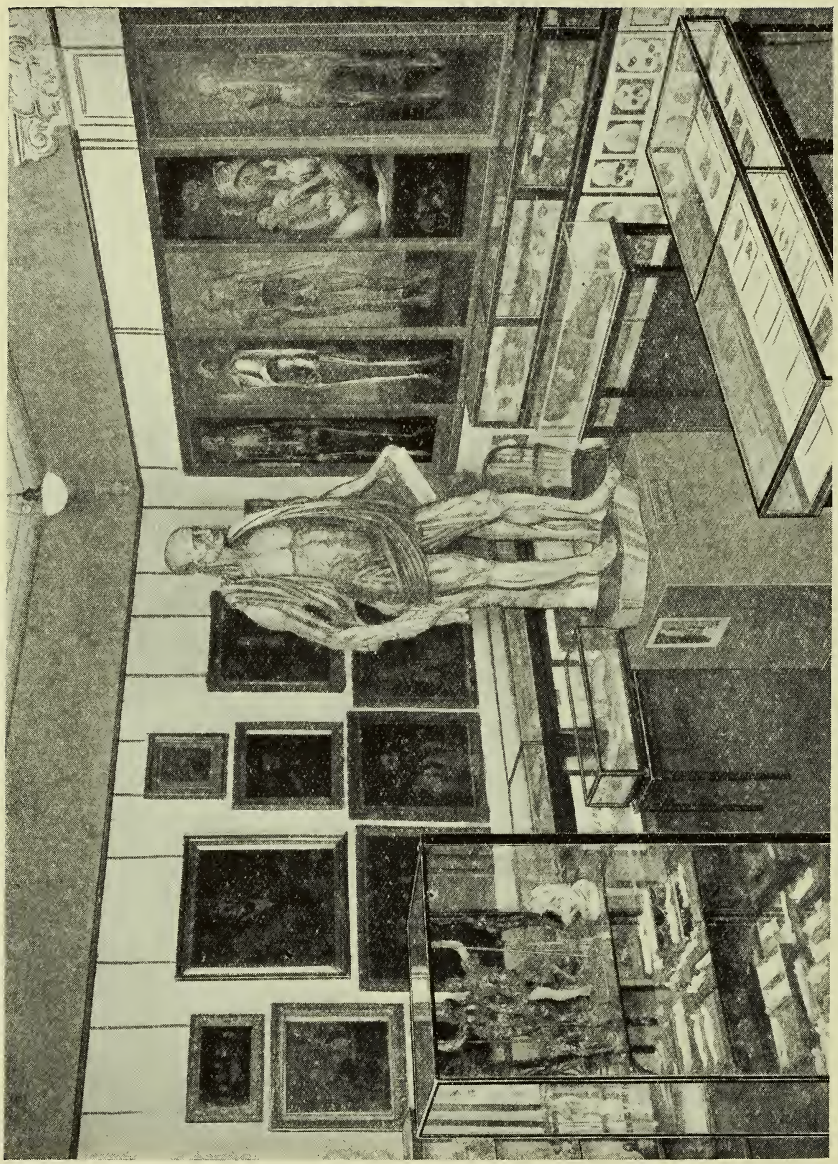

A Part of the Anatomy Room—Wellcome Historical Medical Museum

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